Petroleum Supply Monthly

October 1998

With Data for August 1998

Energy Information Administration Office of Oil and Gas U.S. Department of Energy Washington, DC 20585

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Released for printing: October 29, 1998

Questions concerning the contents of this report should be directed as indicated on page v.

The Petroleum Supply Monthly (ISSN 0733-0553) is published monthly by the Energy Information Administration, 1000 Independence Avenue, SW., Washington, DC 20585, and sells for \$82.00 per year (price is subject to change without advance notice). Second-class postage paid at Washington, DC 20066-9998, and at additional mailing offices. POSTMASTER: Send address changes to Petroleum Supply Monthly, Energy Information Administration, EI-231, 1000 Independence Avenue, SW, Washington, DC 20585.



Data Available Electronically

Data from the Weekly Petroleum Status Report, Winter Fuels Report, and the Petroleum Supply Monthly publications as well as data from other sources are available electronically on the Energy Information Administration's Electronic Publication Bulletin (EPUB) Board, and the Comprehensive Oil and Gas Information Source (COGIS). The schedule for data release is as follows:

Publications/Sources	Platform	Information
Weekly Petroleum Status Report		
Wednesday 9:00 a.m. (weekly)	EPUB/WWW	Table 1 (U.S. Balance Sheet) and Data Log (Table 14 plus 4-week averages)
Wednesday 5:00 p.m. 6th-12th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary)
Thursday by Noon (weekly)	COGIS	Table 1 (U.S. Balance Sheet) and Table 14 (Most recent 5-weeks)
Thursday by Noon 7th-13th (monthly)	COGIS	Table H1 (Petroleum Supply Summary)
Winter Fuels Report (October throu	igh March)	
Wednesday 5:00 p.m. (weekly)	EPUB/WWW	All tables and highlights
Thursday by Noon (weekly)	COGIS	All tables and highlights
Propane Data (April through Septem	nber)	
Second Wednesday of the month (9:00 a.m.)	EPUB/WWW	Propane Stocks
Petroleum Supply Monthly		
23rd-26th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary) and all Summary Statistics and Detailed Statistics Tables
23rd-26th (monthly)	COGIS	Table H1 (Petroleum Supply Summary), and all Summary Statistics and Detailed Statistics Tables
Petroleum Supply Annual	WWW	All tables and data bases
Oxygenate Data		
15 working days after the report month	EPUB/WWW	Table D1 U.S. Summary Table D2 (Fuel Ethanol Production/Stocks) and Table D3 (MTBE Production/Stocks) Table D4 (MTBE Merchant and Captive)
Imports Data		
7th-10th (preliminary)	EPUB/WWW	Import data by company from the Form EIA-814,
23rd-26th (final)		"Monthly Imports Report"
, ,		

Special Notice

Electronic Publishing System (EPUB)

Effective December 31, 1998, the Energy Publishing System (EPUB) will no longer be supported by the Energy Information Administration. Current EPUB users are encouraged to connect to EIA's recently updated web site at http://www.eia.doe.gov, to select 'Petroleum', and to bookmark those reports and tables of interest. Internet users may also sign up to receive some data and analyses through the 'Listserv' selection. While most petroleum-related monthly publications are too large to distribute in this manner, Listserv makes the following weekly petroleum reports directly available to the user via e:mail as soon as they are available for publication:

Crude Oil Watch Data, and Crude Oil Watch Summary
Distillate Watch Data, and Distillate Watch Summary
Motor Gasoline Watch Data, and Motor Gasoline Summary
Propane Watch Data, and Propane Watch Summary (available weekly from October through April, and Monthly otherwise)
Weekly On-Highway Diesel Prices Report
Weekly Retail Gasoline Price Report

If you have any questions on this, please contact Jacob Bournazian by telephone at (202)586-1256 or by E:mail at Jacob.Bournazian@EIA.DOE.GOV.

Comprehensive Oil and Gas Information Source

The Comprehensive Oil and Gas Information Source (COGIS) is a project recently developed by the Energy Information Administration (EIA), in cooperation with the U.S. Department of Commerce in an effort to provide more timely information to its customers. COGIS offers the latest oil and gas data published by the EIA. Selected data series from the *Petroleum Supply Monthly*, the *Petroleum Marketing Monthly*, the *Natural Gas Monthly*, the *Monthly Energy Review*, the *Weekly Petroleum Status Report*, the *Short Term Energy Outlook*, and the *Winter Fuels Report* are available. In addition, COGIS offers timely analysis of major oil and gas trends, and weekly and monthly highlights of oil and gas activity.

Anyone with a workstation connected to an Internet node, or with a personal computer and modem, can have immediate access to oil and gas industry information.

For information, call EIA's National Energy Information Center, (202) 586-8800. To open an account, call the U.S. Department of Commerce, Office of Business Analysis, (202) 482-1986.

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Maximum 4 hours per day	\$400.00	\$400.00	\$400.00				

Contacts

The *Petroleum Supply Monthly* is prepared by the Petroleum Division of the Office of Oil and Gas, Energy Information Administration, under the direction of Ronald W. O'Neill.

Questions, comments, and requests for general information concerning the contents of the *Petroleum Supply Monthly* should be referred to **the National Energy Information Center (NEIC) (202)586-8800**. Requests for copies of tables that appear in this publication should also be addressed to the **NEIC**. Technical questions may be addressed to the following specialists:

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Stocks	Mike Conner	(202) 586-1795
Transportation	Mike Conner	(202) 586-1795
Oxygenate Data	Steve Patterson	(202) 586-5994

Additional information on all energy statistics available from the Energy Information Administration may be obtained from the National Energy Information Center (202) 586-8800.

Preface

The *Petroleum Supply Monthly* (PSM) is one of a family of four publications produced by the Petroleum Division within the Energy Information Administration (EIA) reflecting different levels of data timeliness and completeness. The other publications are the *Weekly Petroleum Status Report* (WPSR), the *Winter Fuels Report*, and the *Petroleum Supply Annual* (PSA).

Data presented in the *PSM* describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply. Included are: petroleum refiners, motor gasoline blenders, operators of natural gas processing plants and fractionators, inter-PAD transporters, importers, and major inventory holders of petroleum products and crude oil. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

Data presented in the *PSM* are divided into two sections: Summary Statistics and Detailed Statistics.

Summary Statistics

The tables and figures in the Summary Statistics section of the *PSM* present a time series of selected petroleum data on a U.S. level. Most time series include preliminary estimates for one month based on the Weekly Petroleum Supply Reporting System; statistics based on the most recent data from the Monthly Petroleum Supply Reporting System (MPSRS); and statistics published in prior issues of the *PSM* and *PSA*.

Detailed Statistics

The Detailed Statistics tables of the *PSM* present statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District level, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources.

Appendices

Four appendices are provided to assist in understanding and interpreting the data presented in this publication:

- Appendix A (District Descriptions and Maps) -Geographic aggregations of the 50 States and the District of Columbia into Refining Districts which make up the PAD Districts.
- Appendix B (Detailed Statistics Explanatory Notes) Information describing data collection, sources, estimation methodology, data quality control procedures, modifications to reporting requirements and interpretation of tables.
- Appendix C (Impact of Resubmissions) Information on revisions to published statistics caused by resubmission of respondent survey forms.
- Appendix D (EIA-819M, Monthly Oxygenate Telephone Report) -Preliminary information on production and stocks of fuel ethanol and methyl tertiary butyl ether (MTBE) by PAD District. Data are collected from a sample of respondents reporting on the MPSRS surveys. Data are also published in the WPSR and are available electronically approximately 15 working days after the end of the month.

Industry terminology and product definitions are listed alphabetically in the Glossary. Final statistics for the data series published in the *PSM*, as well as additional data from the annual refinery and oxygenate capacity surveys are published in the *PSA*. The *PSA* is published approximately five months after the end of the report year.

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Articles

Feature articles on energy-related subjects are frequently included in this publication. The following articles have appeared in previous issues.

U.S. Petroleum Developments: 1990	February 1991 March 1991
Effects of the Clean Air Act's Highway Diesel Fuel Oil Provisions	June 1991
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Timeliness and Accuracy of Petroleum Supply Data	June 1991
Regulation of Underground Petroleum Storage	August 1991
Alternative Transportation Fuels	October 1991
U.S. Petroleum Developments: 1991	February 1992
Comparisons of Independent Statistics on Petroleum Supply	March 1992
U.S. Petroleum Trade, 1991	April 1992
Timeliness and Accuracy of Petroleum Supply Data	September 1992
Three Dimensional Seismology-A New Perspective	December 1992
Summer 1993 Motor Gasoline Outlook	April 1993
Comparisons of Independent Statistics on Petroleum Supply	May 1993
Drilling Sideways	June 1993
The Economics of the Clean Air Act Amendments of 1990	July 1993
Accuracy of Petroleum Supply Data	August 1993
Distillate Fuel Oil Outlook for Winter 1993-1994	October 1993
Propane Outlook for Winter 1993-1994	October 1993
Strategic Shipping Lanes	January 1994
Summer 1994 Motor Gasoline Outlook	April 1994
Accuracy of Petroleum Supply Data	October 1994
Distillate Fuel Oil Assessment for Winter 1994-1995	October 1994
Propane Assessment for Winter 1994-1995	October 1994
Comparisons of Independent Statistics on Petroleum Supply	April 1995
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Propane Assessment for Winter 1995-1996	October 1995
U.S. Refining Capacity Utilization	October 1995
Summer 1996 Gasoline Assessment	April 1996
Recent Distillate Fuel Oil Inventory Trends	May 1996
Recent Trends in Motor Gasoline Stock Levels	May 1996
Comparisons of Independent Petroleum Supply Statistics	August 1996
Accuracy of Petroleum Supply Data	September 1996
The Outlook for U.S. Import Dependence	September 1996
Recent Trends in Crude Oil Stock Levels	October 1996
Distillate Fuel Oil Assessment for Winter 1996-1997	November 1996
Propane Market Assessment for Winter 1996-1997	November 1996
Crosswell Seismology—A View from Aside	December 1996
Comparisons of Independent Petroleum Supply Statistics	July 1997
The Intricate Puzzle of Oil and Gas "Reserve Growth"	July 1997
Propane Market Assessment for Winter 1997-1998	November 1997
Accuracy of Petroleum Supply Data	December 1997
EIA Corrects Errors in It's Drilling Activity Estimates Series	March 1998

Accuracy of Petroleum Supply Data

by Tammy G. Heppner and Carol L. French

Overview

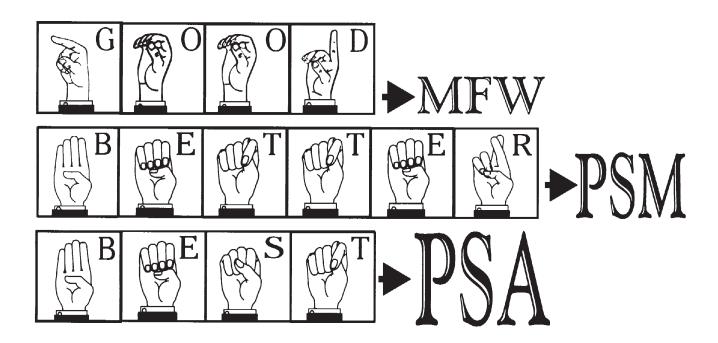
Petroleum supply data collected by the Petroleum Division (PD) of the Energy Information Administration (EIA) displayed improving signs of accuracy in 1997. These data were presented in a series of PD publications: the *Weekly Petroleum Status Report* (WPSR), the Winter Fuels Report (WFR), the Petroleum Supply Monthly (PSM), and the Petroleum Supply Annual (PSA). Weekly estimates in the WPSR and WFR were the first values available.

Figure FE1 illustrates the improving signs of accuracy from the weekly estimates to the interim monthly values to the final petroleum supply values. The monthly-from-weekly (MFW) data are the least accurate but "good." The *PSM* data are more accurate or "better" and the *PSA* data are the most accurate or "best." For 1997, 66 petroleum supply data series were analyzed to determine how close the *PSM* values were to the final *PSA* values. For these series, 45 out of the 66 were within 1 percent of the *PSA* values in terms of mean absolute percent error. Sixty-one petroleum supply data series were analyzed to see how close the MFW estimates were to the final *PSA* values. For these 61 series, 27 were within 2 percent of the *PSA* values in terms of mean absolute percent error and, of those, 11 were within 1 percent.

Two major factors that contribute to the *PSM* values being more accurate than the MFW estimates are: (1) the greater length of time between the close of the reference period and the publication date of the *PSM*; and, (2) some MFW values are estimates whereas many *PSM* respondents extract their actual data from automated accounting systems. The greater length of time allows more in-depth review of the data by the respondents and EIA. Within 2 months of the close of a reference month, interim values are published in the *PSM*. The weekly data are more quickly available. The *WPSR* is available electronically 5 days after and in hardcopy 7 days after the close of the reference week (excluding holiday weeks). Propane data are available electronically and in the *WPSR*. About 5 months after the end of the reference year, final monthly values, reflecting any resubmissions, are published in the *PSA*.

Historically, the weekly publications (WPSR and WFR) and the monthly publication (PSM) provided volumes of crude oil and petroleum products data at relatively increasing levels of accuracy. This article provides petroleum analysts with a measure of the degree to which, on average, estimates and interim values vary from their final values.

Figure FE1. The "Best" Sign for 1997 PD Data



The Petroleum Supply Reporting System

The 15 surveys in the Petroleum Supply Reporting System (PSRS) track the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. To maintain a database with historically accurate observations and current estimates from the petroleum industry, EIA administers three survey series: weekly, monthly, and biennial (every other year).

The PSRS is organized into two data collection subsystems, the Weekly Petroleum Supply Reporting System (WPSRS) and the Monthly Petroleum Supply Reporting System (MPSRS). The WPSRS processes data from the five weekly surveys. In addition, the Form EIA-807, "Propane Telephone Survey," collects data weekly from October through March. The MPSRS includes eight monthly surveys, one biennial survey, and the Form EIA-807 monthly data, which are collected from April through September.

Figure FE2 displays the petroleum supply and distribution system and indicates the points at which petroleum supply data are collected. Both weekly and monthly surveys are

administered at six key points along the petroleum production and supply path: (1) refineries, (2) bulk terminals, (3) product pipelines, (4) crude oil stock holders, and (5) importers of crude oil and products.

Due to budget reductions, EIA modified the collection of the annual Form EIA-820, "Annual Refinery Report" to be the Form EIA-820, "Biennial Refinery Report." Annual U.S. refinery capacity data collection and publication normally presented in Volume 1 of the *PSA* were collected and published for 1997.

The Weekly Petroleum Supply Reporting System

The WPSRS contains the data collected from the five weekly surveys. Each weekly survey is distributed to a sample of the corresponding monthly survey's universe. In Figure FE2, the icons represent the target population of the monthly and weekly surveys of the PSRS. For example, the target population for the survey Forms EIA-801 and EIA-811 is bulk terminal stocks. Thus, the respondents to the Form EIA-801 are a sample of the respondents who report on Form EIA-811. For the weekly surveys, EIA aims for a minimum 90-percent multi-attribute-cutoff sample from the respondents to the

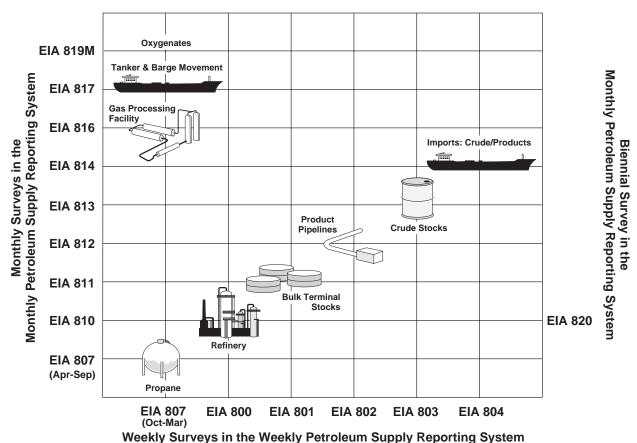


Figure FE2. Petroleum Supply Reporting System: Surveys and Subsystems

corresponding monthly survey. In choosing the sample for each product, companies are ranked in descending order by volume. Respondents are chosen in order, down the list until the sample includes those companies contributing at least 90 percent of a variable's total volume. For example, for distillate fuel oil stocks, the weekly sample includes those respondents whose combined volumes of stocks for distillate fuel oil from refineries, bulk terminals, and pipelines constitute at least 90 percent of the total volume of distillate fuel oil stocks as reported in the corresponding monthly surveys.

With these weekly surveys, EIA can provide timely, relatively accurate snapshots of the U.S. petroleum industry every week. The weekly surveys collect information on the supply and disposition of selected petroleum products and crude oil. The reference period for each weekly survey begins at 7:01 a.m. each Friday and ends at 7:00 a.m. the following Friday. Respondents report their data via telephone, facsimile, or EIA's electronic data collection software package, the Personal Computer Electronic Data Reporting Option (PEDRO). All respondents must submit their data by 5:00 p.m. on the Monday following the end of the reference period. During 2 working days, quality control procedures are executed. Cell values determined to be unusual or inconsistent with other cell values are flagged. The validity of the value of each flagged cell is investigated. Some flagged values are verified by the respondent to be correct; other flagged cells are corrected; and the remaining flagged values are referred to as unresolved. Nonrespondent and unresolved flagged data are imputed using an exponentially smoothed mean of the respondents' historical data.

Within 7 days of the close of the reference week, data are made available to the public in three forms: through the EIA's internet web site (http://www.eia.doe.gov), the EIA electronic publishing system (EPUB), and hardcopy (through the WPSR). Except when holidays delay data processing schedules, values for the weekly variables, with the exception of propane, are available via the internet and EPUB at 9:00 a.m. on the Wednesday following the close of the reference week. Propane data are available via the internet and EPUB at 5:00 p.m. on the same Wednesday. The hardcopy WPSR is distributed on the Friday morning following the close of the reference week.

The Monthly Petroleum Supply Reporting System

The reference period for the monthly surveys starts on the first day of the month at 12:01 a.m. and ends on the last day of the month at midnight. Except for the Form EIA-819M, the deadline for filing monthly surveys is the 20th calendar day following the end of the report month. Data collection for the Form EIA-819M begins on the seventh working day of the month. Form EIA-819M data are solicited by telephone or

received by facsimile. Data for the other monthly surveys are reported via telephone, facsimile, or PEDRO.

During the period of data editing, either the respondent or EIA staff may identify an error. If the respondent discovers an error, the EIA representative for a particular survey is notified and the value is corrected. If EIA's edits diagnose an unusual value, an EIA representative will determine if the value is correct or incorrect by calling the company and/or reviewing historical data.

Within 60 days of the close of the reference month, all of the interim monthly data are published in the PSM. However, customer satisfaction surveys conducted by EIA during 1995 showed a need for faster release of available monthly data. In response to this need, beginning in November 1995, EIA implemented a plan for early release of monthly petroleum statistics approximately 45 days after the end of the report period. The preliminary data are presented in four tables: "U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products," "Imports of Crude Oil and Petroleum Products into the United States by Country of Origin," "Stocks of Crude Oil and Petroleum Products by Petroleum Administration for Defense (PAD) District," and "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State". These preliminary tables are available on the internet and EPUB approximately on the 13th of each month. After incorporation of petroleum exports and crude oil production, these tables are replaced with final tables between the 20th and the 23rd of each month. In addition to the internet, beginning in March 1996, monthly data became available on EIA's CD-ROM called the Energy InfoDisc, which is released quarterly.

Throughout the year, EIA accepts data revisions of monthly data. If a revision is made after the *PSM* has been published, it is referred to as a resubmission. Resubmissions for earlier months are published in Appendix C of the *PSM* and are reflected in the *PSA*.

Beginning with the February 1994 *PSM*, Table H1, "Petroleum Supply Summary" was included to show early estimates of monthly data. The current-month values in Table H1 are preliminary estimates based on weekly submissions. These monthly-from-weekly estimates become available in the *WPSR* and on EPUB on the Wednesday following the first Friday of each month.

Within 5 months of the end of the calendar year, the final monthly values for the previous year are published in the *PSA*. These values reflect all *PSM* resubmissions and other data corrections. The values contained in the *PSA* are EIA's most accurate measures of petroleum supply industry activity.

Table FE1. Average Coverage for Weekly Surveys, 1997 and 1996 (Percent of Final Monthly Volumes Included in Monthly-from-Weekly Sample)

	Stocks							Production		Imports	
Product	Refinery		Bulk Terminal		Pipeline						
	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	
otal Motor Gasoline	98	98	93	93	97	97	99	99	98	96	
et Fuel	98	98	94	94	99	99	99	99	99	98	
Distillate Fuel Oil	97	97	88	88	98	98	97	97	90	89	
Residual Fuel Oil	95	94	91	91	_	_	95	94	95	94	
Crude Oil	96	96	_	_	_	_	_	_	94	95	

— = Not Applicable.

Source: Energy Information Administration, Petroleum Supply Reporting System.

Factors Affecting Data Accuracy

Maintaining an accurate database is a major goal of EIA. The quality of the data drives the quality of all qualitative and quantitative analyses conducted using these data. Accuracy and timeliness are primary attributes of high quality data. Accuracy of survey data is measured as the closeness of the published values to the true values (i.e., those values that would be obtained if the target population had been correctly surveyed and all the data had been precisely recorded).

Respondents to the monthly surveys have more time to file than the weekly respondents, enabling them to collect, review, and revise their data more carefully than the weekly respondents. Additionally, EIA has more time to edit the monthly data. Also, some weekly respondents report estimates while many monthly respondents extract actual data from accounting systems. Thus, the monthly data are more accurate.

Some sources of error, such as nonresponse, are not totally preventable. Other errors, such as sampling errors, are unique to a particular type of survey. One situation where sampling error occurs is if the group of sampled respondents is dissimilar to the full population. Within the PSRS, only weekly surveys, the Form EIA-819M, "Monthly Oxygenate Telephone Report," and the Form EIA-807, "Propane Telephone Survey," are at risk of having sampling errors. However, all surveys in the PSRS are at risk for nonsampling errors, such as: (1) insufficient coverage of respondents (the survey frame does not include all members of the target population); (2) nonresponse; (3) response error; and (4) internal processing errors such as incorrect data entry. A detailed discussion of factors influencing data accuracy and how they are minimized in the PSRS follows.

Samples and Sampling Error

A sample is a subsection of a universe identifying members of a target population. The weekly surveys are administered to samples of the monthly populations to reduce respondent burden and to expedite the turnaround of data from survey respondents to the public. As with any sample, the values obtained are different from those obtained if the full universe had been surveyed. Sampling error is the difference between a sample estimate and a population value.

There are five samples, one for each weekly petroleum supply survey, in the WPSRS. For these surveys, the sampling error is minimized by using a minimum 90-percent multi-attribute-cutoff sample from the corresponding monthly survey's frame. At the end of each month, updates are made to the samples and survey frames if a 90-percent coverage was not obtained.

For the weekly surveys, better coverage will most likely reduce sampling error. As shown in Table FE1, 1997 coverage was comparable to 1996. All but one of the 21 product and supply type combinations had coverage of 90 percent or above in 1997. For 13 of the 21 combinations, 1997 coverage increased from 1996. Tabulations were done before rounding of the coverage values. The largest percentage increase from 1996 to 1997 was for total motor gasoline imports, from 96 to 98 percent.

Nonsampling Error

Unlike sampling errors, all survey data, even those from a census survey, are at risk of incurring nonsampling errors. There are two categories of nonsampling errors, random and systematic. With random error, on average, and over time, values will be overestimated by the same amount they are underestimated. Therefore, over time, random errors do not bias the data, but they will give an inaccurate portrayal at any point in time. On the other hand, systematic error is a source of bias in the data, since these patterns of errors are made repeatedly. The following is a discussion of how the four most frequently occurring types of nonsampling error are minimized within the PSRS.

Frame Updates

The list of all companies identified as members of the target population is called a frame. If members of the target population are not included in the frame, there is an

Table FE2. Average Response Rates for Monthly and Weekly Surveys, 1997

	Respo	ndents to Monthly S	urveys	Respondents to Weekly Surveys				
Survey Site	Average Universe Size	Average Number of Respondents	Average Reponse Rate ¹	Average Weekly Sample Size	Average Number of Respondents	Average Reponse Rate ²		
Refinery	258	251	97.2	186	180	96.7		
Bulk Terminal		296	95.5	77	73	94.8		
Pipeline	81	81	99.5	43	42	97.1		
Crude Oil Stocks	177	174	98.7	84	82	97.3		

¹ The average response rates for monthly surveys are calculated by summing the individual monthly response rates and dividing by 12.

Source: Energy Information Administration, Petroleum Supply Reporting System.

undercount of the aggregate data. To diminish the chance of undercounting, the PSRS frames are continually updated. New companies are identified through continual review of petroleum industry periodicals, newspaper articles, and correspondence from respondents. During the frames update, each frame is scrutinized to assure completeness.

Maintaining a Low Nonresponse

Survey respondents are required by law to report to EIA (see Explanatory Note 6 of the *PSM* for a description of action for chronic nonresponse). The 1997 response rates for the weekly surveys and their corresponding monthly surveys are enumerated in Table FE2. Even though the 1997 average response rates for each of the EIA weekly and monthly surveys was excellent, there was a slight decrease for each survey from 1996. Budget cuts at respondent companies had a negative effect on response rates. In addition, budget cuts at EIA reduced funding available for nonrespondent followup.

To mitigate the effect of nonresponse, imputed values are calculated for all nonreported values except monthly imports. Weekly imputed values are the exponentially smoothed mean of that respondent's historical values for that variable. Monthly imputed values are the previous month's value for the particular respondent and variable. For imports, however, there is a great deal of fluctuation from one reference period to another, with respondents frequently having no imports of a particular product. As a result, zero is the value imputed for nonreported cells on the monthly survey. In addition, the monthly imports are collected and published at a much greater level of detail than the weekly imports, which makes imputation impractical.

Reducing Response Error

Over the past 5 years, many structural and procedural improvements to the PSRS system have been made in order to reduce the problem of nonsampling errors. One such improvement has been the increased participation in the PEDRO system, which permits all weekly and monthly survey data except the Form EIA-819M and Form EIA-807 to be submitted to EIA electronically. A respondent entering values via PEDRO may execute edit routines prior to transmission of the survey responses. These routines include consistency and outlier (extreme value)

checks of the data. Unusual or nonreported cells are flagged and, prior to transmission of the data, a representative of the company is able to review and verify or correct data in the flagged cells.

Even with sophisticated edit checks, response error (the difference between the reported value and the actual value) remains the most likely cause of data inaccuracy. The weekly surveys are more susceptible to response error since some of their values are estimates. Many monthly respondents abstract their actual data from accounting systems and thus are generally more accurate.

Maintaining accurate accounting records, however, does not ensure against response error. For example, numbers can be transposed within the correct cell; an otherwise correct value may be entered in the wrong cell; a respondent may misinterpret the intent of a question; or the wrong units may be used.

Survey Clarity

The terms, layout, and definitions on all survey forms are periodically reviewed for completeness, clarity, and consistency across surveys. At regular intervals, survey intent, as well as what data are collected, are subject to industry and government review. To the extent possible, industry changes in terminology and practice are incorporated into the PSRS on an ongoing basis.

Data Assessment

Each of the variables included in these analyses is of current and historical interest. Of the 66 variables for which both *PSM* and *PSA* values were published, only 61 of them were published weekly throughout 1997. For each variable, six measures of accuracy were calculated to compare the differences between the MFW and *PSM* values relative to the *PSA* values.

 Error is the difference between the estimate or interim value and the final value for a given month. For inputs, production, stock change, imports, exports, and product supplied, values are expressed in units of thousands of barrels per day. For stocks, values are expressed in units of thousands of barrels.

² The average response rates for weekly surveys are calculated by summing the individual weekly response rates and dividing by 52. Note: Percents are calculated before rounding.

MFW Error = MFW Volume - PSA Volume

PSM Error = PSM Volume - PSA Volume

 Percent Error is the error for a given month divided by the final value for a given month, and multiplied by 100.

MFW Percent Error =
$$\frac{\text{MFW Error}}{PSA \text{ Volume}} \times 100$$

 $PSM \text{ Percent Error} = \frac{PSM \text{ Error}}{PSA \text{ Volume}} \times 100$

- Mean absolute error is the weighted average over the 12 months of the year of the absolute values of the errors for each month. The mean absolute error measures the average magnitude of the revisions that took place over a year. Outliers increase the mean absolute error. The number of days in the month is used for weighting all product categories except stocks. Stocks are weighted equally for each of the 12 months.
- Mean absolute percent error is the weighted average over the 12 months of the year of the absolute values of the percent errors. It provides a measure of the average magnitude of the revisions relative to final values. The mean absolute percent error has an inverse relationship with data accuracy; i.e., the smaller the mean absolute error, the closer the interim data are to the final data; conversely, the larger the mean absolute percent error, the greater the difference in the interim value and the final value. Outliers inflate the mean absolute percent error.
- Range is the difference between the smallest and largest percent errors. The range shows the dispersion of the percent differences between interim and final values.
- Median of the percent errors is the point at which half the
 values are higher and half are lower. Unlike the mean, the
 median is not affected by an outlier. In these analyses,
 each distribution has 12 observations. The median is the
 average of the sixth and seventh ordered observation.

The average final absolute volumes and the mean absolute percent error for MFW estimates and *PSM* interim values for 1997 and 1996 are presented in Table FE3. The average final absolute volumes are presented to give the reader an idea of the magnitude of these volumes. Variables with very small volumes are prone to larger percent changes because a modest volume change is being compared to a small final volume. The mean absolute error and the size of the volumes involved must both be included in the interpretation of data accuracy.

The 1997 MFW mean absolute percent errors which were within 2 percent of their respective *PSA* values (27 of the 61 MFW series), and the 1997 *PSM* mean absolute percent errors which were within 1 percent of their *PSA* values (45 of the 66 *PSM* series), are distinguished by a single asterisk. Mean

absolute percent errors that were greater than 10 percent are marked by a double asterisk. There were 8 such MFW series and 3 *PSM* series.

For 1997, 7 of the 11 weekly production series decreased in mean absolute percent error from 1996. Thirteen of the 14 production series have a single asterisk in the *PSM* column, indicating a mean absolute percent error of less than 1 percent from the *PSA*. The decrease in the MFW mean absolute percent error for oxygenated motor gasoline production is due to a resolution of reporting deficiencies. Weekly fuel ethanol supply and disposition data are not available; therefore, the weekly oxygenated motor gasoline field production is based on the latest available monthly value.

The single asterisks in Table FE3 by the stock series show that, as in prior years, the stock values for both MFW estimates and *PSM* interim values are very close to the final *PSA* values. A major exception is the double asterisk shown by the MFW percent error for oxygenated motor gasoline stocks. The increase is related to the average absolute volume. Fuel ethanol and methyl tertiary butyl ether stocks are not collected weekly, but are collected on the Form EIA-819M, "Monthly Oxygenate Telephone Report." The survey provides production data and preliminary stock data from a sample of respondents reporting on the monthly surveys and from the universe of oxygenate producers. These data are displayed in Appendix D of the *PSM*. Interim data are collected later on the monthly surveys and published in the *PSM*.

Stock change is the difference between stocks at the beginning of the month and stocks at the end of the month. Since the monthly change in stock levels is small compared to the stock levels themselves, a large percent error in stock change can occur when the percent errors in stock levels are small.

Crude oil stock change is one of the components in the calculation of unaccounted for crude oil (calculated disposition minus calculated supply of crude oil). For both the MFW and the PSM numbers, the volume of the unaccounted for crude oil may be increased by a combination of factors including an understatement of imports, an overstatement of exports, an understatement of crude oil production, an understatement of stock withdrawals, and an overstatement of crude oil inputs. The overstatement of crude oil inputs can be caused by injections along crude oil pipelines of natural gas liquids. When refiners receive this mixture, they process it as crude oil. As seen in Table FE3, the production, imports, and refinery inputs of crude oil have a small mean absolute percent error relative to crude oil stock change. There was a large decrease in mean absolute percent error for 1997 MFW and PSM values relative to 1996 due to corrections of misreported data.

For petroleum products, stock change is a component in the calculation of product supplied (representing the consumption of petroleum products). Unlike the other variables, stock change values can be negative. Stock change thus has an added

Table FE3. Summary Statistics for Differences Between Interim and Final Data, 1997 and 1996

Variable	PSA Average Absolute Volumes		Mean	from-Weekly Absolute ent Error	PSM Mean Absolute Percent Error		
	1997	1996	1997	1996	1997	1996	
Crude Oil Production (thousand barrels/day)	6,452	6,465	* 0.87	0.79	* 0.78	0.50	
Refinery Operations							
Refinery Crude Oil Inputs (thousand barrels/day)	14,662	14,195	* 0.36	0.32	* 0.24	0.19	
Operable Utilization Rate (percent)	95	94	* 1.24	1.20	* 0.28	0.70	
Production (thousand barrels/day)							
Total Production	18,918	18,467	_		* 0.17	0.25	
Refinery Production	16,759	16,324	* 1.82	1.44	* 0.16	0.25	
Finished Motor Gasoline	7,870	7,647	* 0.83	0.96	* 0.18	0.70	
Reformulated Motor Gasoline	2,406	2,221	* 1.98	2.97	* 0.86	1.83	
Oxygenated Motor Gasoline	587	454	** 13.04	56.41	3.62	3.09	
Other Motor Gasoline	4,877	4,972	* 1.81	4.00	* 0.40	0.60	
Jet Fuel	1,554	1,515	* 1.25	1.27	* 0.41	0.11	
Distillate Fuel Oil	3,392	3,316	* 1.50	0.42	* 0.27	0.30	
Low Sulfur Distillate Fuel Oil	2,162	2,084	* 1.17	1.72	* 0.66	0.25	
High Sulfur Distillate Fuel Oil	1,229	1,232	3.46	2.52	* 0.81	2.77	
Residual Fuel Oil	708	726	3.96	4.17	* 0.39	0.80	
Other Products	5,394	5,264	- O.50		* 0.70	0.59	
Propane	1,092	1,044		_	* 0.16	0.18	
Other Products Refinery Production	3,362	3,204	7.86	7.18	* 0.13	0.58	
Stocks (thousand barrels)							
Total Stocks	1,552,154	1,525,640	* 0.71	0.57	* 0.06	0.07	
Total Stocks, excl. SPR	988,701	944,599	* 1.12	0.95	* 0.10	0.12	
Total Crude Oil Stocks	874,713	884,400	* 0.27	0.93	* 0.07	0.12	
Crude Oil Stocks, excl. SPR	311,260	303,359	* 0.77	0.76	* 0.21	0.11	
SPR Stocks	563,453	581,041	* 0.00	0.04	* 0.00	0.00	
Refined Products Stocks	677,441	641,240	* 1.41	1.43	* 0.07	0.00	
Total Motor Gasoline Stocks	200,295	200,699	* 0.77	1.03	* 0.12	0.10	
Reformulated Motor Gasoline Stocks	39,759	39,413	3.51	2.18	* 0.40	1.24	
Oxygenated Motor Gasoline Stocks	957	1,522	** 26.70	22.23	** 14.23	8.92	
Other Motor Gasoline Stocks	117,448	118,855	* 1.30	1.56	* 0.20	0.20	
Jet Fuel Stocks	•	•	* 1.29	1.68	* 0.84	0.20	
Distillate Fuel Oil Stocks	42,162 120.913	38,246 106,959	* 1.75	1.00	* 0.24		
	-,		* 1.91		0.24	0.19	
Low Sulfur Distillate Fuel Oil Stocks	63,474	59,291	1.01	1.67	0.43	0.28	
High Sulfur Distillate Fuel Oil Stocks	57,439	47,668	2.27	2.48	0.24	0.33	
Residual Fuel Oil Stocks	38,604	36,367	* 1.70	2.69	0.22	0.27	
Other Products Stocks	275,468	258,969	2.39	3.30	0.10	0.18	
Propane Stocks	44,947	38,386	2.34	4.89	0.29	0.48	
Fuel Ethanol Stocks Methyl Tertiary Butyl Ether Stocks	2,866 8,920	1,425 9,718	6.46 7.64	5.62 6.26	* 0.62 1.40	1.39 0.62	
	0,020	0,7 10	7.01	0.20	1.10	0.02	
Stock Change (thousand barrels/day)							
Total Stock Change	587	563	** 73.10	84.30	7.60	7.56	
Total Crude Oil Stock Change	309	211	** 45.20	1,258.53	9.51	220.89	
Refined Products Stock Change	504	535	** 82.79	71.92	** 17.15	8.08	
Imports (thousand barrels/day)							
Total Imports	10,162	9,478	3.01	2.68	2.46	0.84	
Total Crude Oil Imports	8,225	7,508	2.63	1.75	2.72	0.39	
Crude Oil Imports, excl. SPR	8,225	7,508	2.63	1.75	2.72	0.39	
SPR Imports	0	0	* 0.00	0.00	* 0.00	0.00	
Refined Products Imports	1,936	1,971	5.62	10.37	1.35	2.74	
Finished Motor Gasoline Imports	309	336	6.20	13.68	2.32	4.16	
Reformulated Motor Gasoline Imports	161	174	9.05	15.10	2.99	6.27	
Oxygenated Motor Gasoline Imports	0	0	* 0.00	0.00	* 0.00	0.00	
Other Motor Gasoline Imports	148	163	** 16.05	22.45	2.27	3.61	

See footnotes at end of table.

Table FE3. Summary Statistics for Differences Between Interim and Final Data, 1997 and 1996 (Continued)

Variable	<i>PS</i> Average <i>P</i> Volur	Absolute	Monthly-fr Mean A Perce	ı	PSM Mean Absolute Percent Error		
	1997	1996	1997	1996	1	997	1996
Distillate Fuel Oil Imports	228	230	6.89	11.31	*	0.66	2.45
Low Sulfur Distillate Fuel Oil Imports	103	112	7.90	9.92		4.34	2.84
High Sulfur Distillate Fuel Oil Imports	125	118	9.65	19.54		3.71	2.29
Residual Fuel Oil Imports	194	248	** 11.91	13.03		3.35	0.79
Other Products Imports	1,114	1,045	8.67	15.95		2.01	5.63
Propane Imports	113	119	_	_	** /	12.67	2.22
Exports (thousand barrels/day)							
Total Exports	1003	981	8.08	6.31	*	0.02	0.00
Crude Oil Exports	108	110	** 71.94	41.76	*	0.03	0.00
Refined Products Exports	896	871	8.13	7.13	*	0.02	0.00
Total Net Imports (thousand barrels/day)	9,158	8,498	2.93	3.03		2.72	0.94
Products Supplied (thousand barrels/day)							
Total Products Supplied	18,620	18,309	* 1.36	1.49	*	0.27	0.41
Finished Motor Gasoline Supplied	8,017	7,891	* 0.73	1.43	*	0.23	0.52
Jet Fuel Supplied	1,599	1,578	* 1.97	3.07	*	0.84	0.43
Distillate Fuel Oil Supplied	3,435	3,365	2.18	1.88	*	0.37	0.30
Residual Fuel Oil Supplied	797	848	6.54	6.65	*	0.88	1.10
Other Products Supplied	4,773	4,627	3.77	3.98	*	0.59	0.73
Propane Supplied	1,170	1,136	_	_		1.21	0.47

^{- =} Not Applicable.

Notes: •Error is the difference between Monthly-from-Weekly estimates or interim monthly data published in the *Petroleum Supply Monthly* and the final value as published in the *Petroleum Supply Annual*. Percent error is the error multiplied by 100 and divided by the final published value. Mean absolute error is the weighted average of the absolute errors. Mean absolute percent error is the weighted average of the absolute percent errors. The number of days in the month is used for weighting all product categories except stocks. Stocks are weighted equally for each of the 12 months. •Totals may not equal sum of components due to independent rounding. •All components of Other Products are not displayed. Source: Energy Information Administration, Petroleum Supply Reporting System (including U.S. Bureau of the Census data).

dimension by which to evaluate accuracy; this is the correctness of the direction of the change. Table FE4 provides a measure of accuracy of the direction of MFW and *PSM* stock change values for 1997 and 1996. For 1997 MFW total stock change values, only one month differed in direction of the *PSA* values compared to four months in 1996. The 1997 direction of *PSM* stock change values was correct 100% of the time in all three stock change categories. The direction of *PSM* stock change values was correct only 83 percent of the time in 1996.

For imports, one reason for the large mean absolute percent errors in the MFW values is that shipments do not always arrive during the week in which they were expected. This has a greater impact when the end of the month occurs in the middle of the week. Only three of the 15 MFW import series in Table FE3 showed an increase in mean absolute percent error from 1996 to 1997 compared to eight from the 1995 to 1996 comparison performed last year. For the *PSM*, seven of the 16 import series increased in mean absolute percent error compared to last year's increase of 13.

Table FE4. Number of Months In Which the Direction of Non-Final Stock Change Values Differed From *PSA*

	Number of Months		
	1997	1996	
Total Stock Change			
MFW and PSA Values	1	4	
PSM and PSA Values	0	0	
Crude Stock Change			
MFW and PSA Values	1	1	
PSM and PSA Values	0	2	
Refined Products Stock Change			
MFW and PSA Values	3	2	
PSM and PSA Values	0	0	

^{* =} For 1997 MFW values, mean absolute percent error less than or equal to 2; for 1997 *PSM* values, mean absolute percent error less than or equal to 1.

^{** =} For 1997, mean absolute percent error greater than 10.

SPR = Strategic Petroleum Reserve

With the exception of refinery receipts in the Virgin Islands, EIA does not collect export data. They are gathered by the U.S. Customs Service on a monthly basis and are compiled by the U.S. Bureau of the Census. They are received by EIA on a monthly basis approximately 7 weeks after the close of the reporting month. The weekly estimates for exports are projections based on past monthly data. Because the export data are highly variable, it is difficult to obtain estimates of comparable quality to domestic estimates.

Products supplied is the calculation of field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude oil losses, minus refinery inputs, minus exports. Therefore, the accuracy of products supplied is affected by the individual components.

Box and Whisker Plots

Example 1 in the shaded box titled "Structure of Box and Whisker Plots," is a simplified illustration of the box and whisker plots that follow. The box and whisker plots map the 5-year trends in historical accuracy of weekly estimates and monthly interim values. The details provided by the box and whisker plots include: historical trends, the range of monthly percent errors, direction of the error (i.e., overestimation or underestimation), and the identification of unusual values.

Each box and whisker plot is placed on a graph, where the horizontal axis represents the year and the vertical axis represents the percent error. The center horizontal line for all the box and whisker plots is zero percent error. For each variable studied, a pair of charts, each containing five box and whisker plots (one for each year, from 1993 through 1997), are presented side-by-side; the chart on the left contains the percent errors for the MFW estimates, and the chart on the right contains the percent errors for the *PSM* values. To facilitate the comparison of MFW percent errors and the *PSM* percent errors, the plots have the same scale.

The position of the box along the y-axis denotes whether the MFW or *PSM* values are predominantly overestimates or underestimates of the *PSA* values. For example, if the majority of the MFW values were overestimates, more than half of the box would be above the zero percent error line.

Crude Oil Production and Crude Oil Inputs

Crude oil production data are not collected through any of EIA's surveys. EIA's Dallas Field Office assembles data collected from State agencies responsible for measuring crude oil production. Based on historical trends and data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report," EIA estimates weekly and monthly production. Final estimates based on revised Form EIA-182 data are published in the *PSA*. Figure FE3 presents errors of MFW and *PSM* values relative to

PSA values for crude oil production and inputs. Over the last 5 years, both MFW and PSM crude oil production values have been quite close to the PSA values. In 1997, all but one of the MFW values were underestimated. The median for the percent errors had the largest absolute percent error of -0.85 percent compared to prior years. One outlier in January (1.45) was due to resubmissions. Similarly, the median percent error for the 1997 PSM errors was -0.68, resulting in the largest absolute percent over the 5-year period. The range of the 1997 PSM percent errors, ranging from -1.57 to 0.65 percent, was the largest range for the 5 years studied and June 1997 (-1.57) had the largest absolute percent error over the 60-month period. The small percent errors of both MFW and PSM crude oil values demonstrate the consistency and precision of EIA's estimation procedures for weekly and monthly crude oil production.

For 1997, all of the MFW percent errors for refinery crude oil inputs were within 1 percent of the final values. Historically, the *PSM* refinery crude oil inputs have been extremely close to their final values. For 1997, all of the *PSM* percent errors were within 0.44 percent. One month did not have a revision; whereas, all other months were underestimated. The median (-0.24) for the 1997 *PSM* percent errors had the largest absolute percent for the 5-year period. The ranges of the MFW and *PSM* percent errors were the smallest of all the other plots analyzed.

Product Production

As expected, *PSM* interim values for production of each of the four major petroleum products were superior to their comparable MFW estimates. Figures FE4 and FE5 contain the box and whisker plots for motor gasoline and distillate fuel oil production, and residual fuel oil and jet fuel production, respectively.

The motor gasoline production percent errors, displayed in Figure FE4, had the smallest range (2.40) over the 5-year period. Compared to 1996, the 1997 *PSM* interim values greatly improved. Over the 5-year period, the 1997 range of percent errors was the smallest (0.62).

For the 1997 distillate fuel oil production MFW values, all but one month were overestimated. As in prior years, *PSM* interim values for distillate fuel oil production were close to final values. All of the percent errors for 1997 were within 0.72 percent; and in 58 of the last 60 months, *PSM* percent errors have been within 1 percent of the final values.

The box and whisker plots for residual fuel oil production and jet fuel production are shown in Figure FE5. Similar to 1996, the 1997 distribution of MFW percent errors for residual fuel oil ranged from -9.81 to 6.32 percent. All of the *PSM* percent errors were within 1 percent of the final values except for one outlier of -1.66 occurring in October due to revisions.

Structure of Box and Whisker Plots

All box and whisker plots discussed in this article are the visual presentation of a variable's distribution of 12 values of percent errors for either MFW or *PSM* values relative to *PSA* values for a given year. In general, box and whisker plots group data, ordered from smallest to largest, into four areas of equal frequency, quartiles, and show the range and dispersion of data within the quartiles. Sometimes the values of quartiles must be interpolated, i.e., if there are two values that meet the criteria of a quartile, then the average of the two must be taken. Presented below is a discussion of components of box and whisker plots and how they apply to the 12-value distribution illustrated in Example 1: -35, -20, -11, -9, 0, 0, 0, 0, 4.5, 5.5, 15, and 20.

First Quartile

Twenty-five percent of the values are equal to or below the first quartile. In Example 1, the first quartile is the average of the third and fourth ordered observations, i.e., (-11+(-9))/2=-10. The first quartile demarcates the lower boundary of the box.

Second Quartile

The second quartile is the median, and it intersects the box. Fifty percent of the observations are equal to or below the median; in our example, the values of these six observations are: 0, 0, -9, -11, -20, and -35. Also, for this example, the median is the average of the sixth and seventh value, 0, i.e., (0+0)/2. The plot provides the value of the median (the second quartile) as well as information on how the median compares in magnitude to the rest of the observations. Outliers distort the magnitude of the mean, whereas a median is not distorted since it is the actual value that falls in the middle of the distribution. Since outliers have occurred in the distributions of values of PSRS variables, a median is preferred to a mean when assessing accuracy.

Third Quartile

Seventy-five percent of the observations (9 in this case) have values equal to or below the third quartile. In Example 1, the third quartile is 5, i.e., (4.5+5.5)/2. The third quartile demarcates the upper boundary of the box.

Box

The box contains half of all the values. In Example 1, as well as in each box found in Figures FE3-FE11, a minimum of six values are contained within the box. The interquartile range is the length of the box, the difference between the first and third quartiles. The interquartile range for Example 1 is 15, i.e., 5-(-10).

Whiskers

Each whisker extends out from the box, one from the first quartile and the other from the third quartile, to the most extreme value that still falls within 1.5 times the interquartile range. In Example 1, a whisker extends from the third quartile, 5, to 20, which is the maximum value and is within 1.5 interquartile ranges of 5 (as it is less than 5+(1.5*15)=27.5). Also in Example 1, the lower whisker extends from the first quartile -10, to -20, which is the lowest value of the distribution within 1.5 interquartile ranges of the first quartile.

Fourth Quartile

The fourth quartile is the maximum value of the distribution. In Example 1, the fourth quartile, 20, also demarcates the upper value of the top whisker as it is within 1.5 interquartile ranges of the third quartile.

Outlier

An outlier, identified as an asterisk, is an observation that is more than 1.5 interquartile ranges greater than the third quartile, or more than 1.5 interquartile ranges less than the first quartile. In Example 1, there is one outlier, -35. It is less than the lower whisker's threshold value, which is -32.5 (-10-(1.5*15)). The importance of the occurrence of an outlier depends on the distribution of the variable. If the interquartile range is very tight and the outlier is in close proximity, then there is little concern about the occurrence of that outlier. (See Figure FE3, MFW vs *PSA* of Crude Oil Production for 1997.)

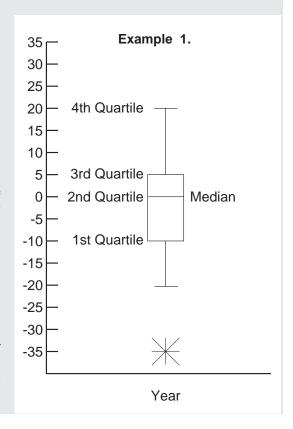
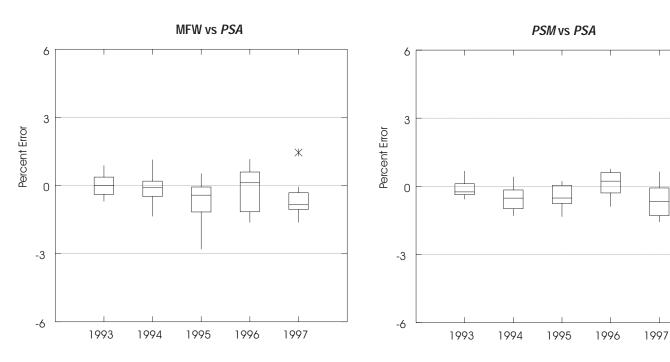


Figure FE3. Range of Percent Errors for MFW and *PSM* Crude Oil Production and Refinery Crude Oil Inputs Data, 1993 - 1997





Refinery Crude Oil Inputs

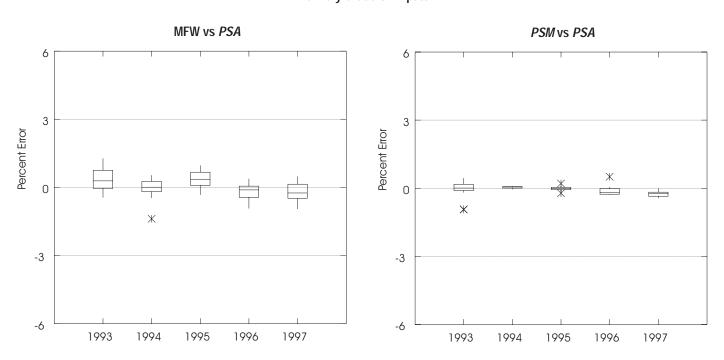
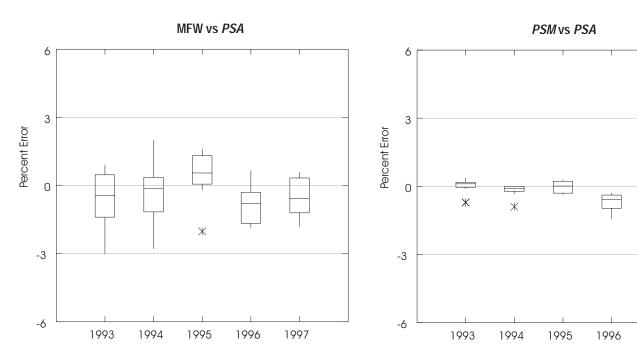


Figure FE4. Range of Percent Errors for MFW and *PSM* Motor Gasoline and Distillate Fuel Oil Production Data, 1993 - 1997

Motor Gasoline Production



Distillate Fuel Oil Production

1997

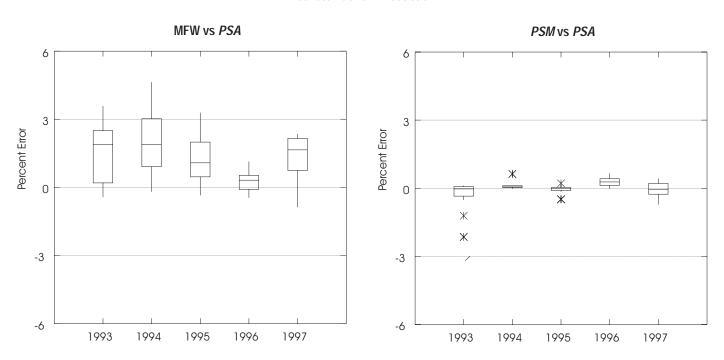
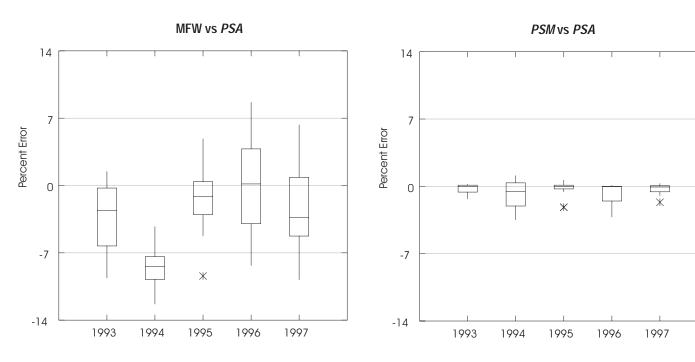
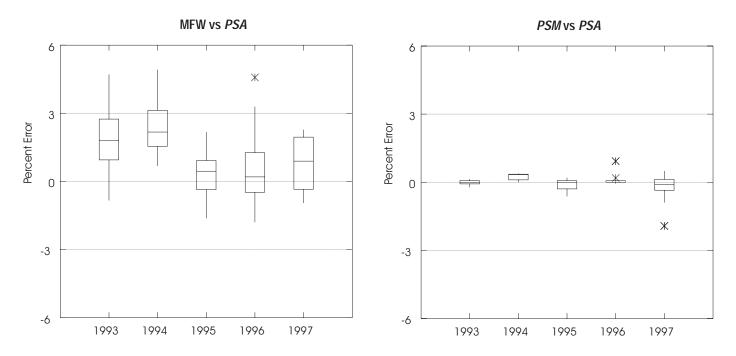


Figure FE5. Range of Percent Errors for MFW and *PSM* Residual Fuel Oil and Jet Fuel Production Data, 1993 - 1997

Residual Fuel Oil Production



Jet Fuel Production



The range of percent errors (3.23) for the 1997 MFW values of jet fuel production was the smallest over the 5-year period, ranging from -0.95 to 2.28 percent. Conversely, the range for the *PSM* percent errors was the largest over the 5-year period, due to an outlier in February (-1.92) due to resubmissions. This outlier was the largest percent error and the only percent error greater than 1 percent over the 60-month period.

Stocks

Figures FE6, FE7, and FE8 show the yearly distribution of percent errors for stocks of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, and propane. Figure FE6 shows the box and whisker plots for crude oil stocks and motor gasoline stocks. Similar to the previous four years, the 1997 MFW percent errors for crude oil ranged from -1.43 to 1.18 percent. The 1997 *PSM* interim values were mostly overestimates and were within 0.63 percent of the *PSA*. The percent errors had a tight distribution around the median of 0.11 percent.

For 1997, all but one of the MFW estimates for motor gasoline stocks were underestimated. All of the *PSM* percent errors were within 0.28 percent and the median was close to zero. The 1997 ranges for the MFW and *PSM* percent errors were the smallest over the 5-year period, 2.22 and 0.49 percent, respectively.

Figure FE7 shows box and whisker plots for distillate and residual fuel oil stocks. Similar to prior years, most of the MFW estimates for 1997 distillate fuel oil stocks were underestimates. In contrast to 1996, the *PSM* interim values were mostly overestimates of the final *PSA* and were within 0.56 percent.

Residual fuel oil typically has larger percent errors than other stock series. The 1997 range, 8.95 percent, for the MFW percent errors was the largest over the 5-year period caused by an outlier in March (-5.30) due to revisions. The distribution of 1997 *PSM* percent errors was tightly grouped around the smallest median (-0.02) over the 5-year period. The two outliers occurred in September (1.05) and October (-0.63) due to resubmissions during those months.

The box and whisker plots for jet fuel stocks and propane stocks are shown in Figure FE8. For 1997, the percent errors for jet fuel stocks ranged from -4.58 to 1.64 percent with an outlier in June (-4.58) due to revisions. The 1997 range (2.31) for the *PSM* percent errors was the largest over the 5-year period with August (-2.09) having the largest absolute percent error over the past 60 months.

Similar to prior years, most of the 1997 MFW propane stocks underestimated the *PSA* values. In contrast to 1996 in which the range was the largest, the range for the 1997 percent errors was the smallest over the 5-year period. All but one of the *PSM* percent errors were within 0.77 percent of the *PSA* values. The four

outliers in January, February, April, and September were the result of large resubmissions for those months.

Imports

Figures FE9, FE10, and FE11 show the yearly distributions of percent errors for the imports of crude oil and four products: motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel. Because of the irregularity of imports for crude oil and petroleum products, the magnitude and range of percent errors for both the MFW and the *PSM* imports numbers can be expected to be much larger and wider than for production and stocks.

Figure FE9 shows that most of the 1997 MFW estimates of crude oil imports were underestimated. There were two outliers: May (-7.44) and October (-9.72) due to resubmissions for those months. The October percent error was the largest over the 60-month period. In contrast to prior years, all of the *PSM* interim values underestimated the final values. The 1997 median of -3.02 percent had the largest absolute percent error over the 5-year period and May (-4.32) had the largest absolute percent error over the 60-month period. Several respondents had large crude oil import revisions and additions in 1997.

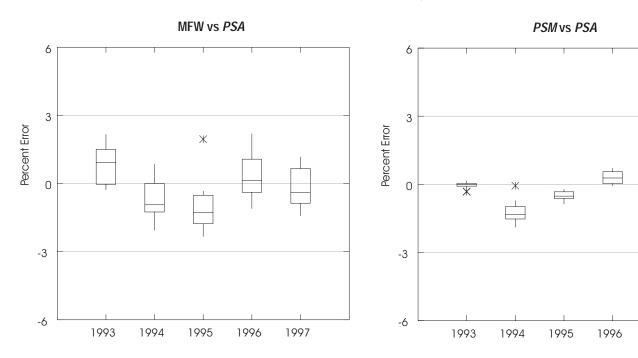
The distributions of percent errors of the MFW estimates and *PSM* interim values for 1993 through 1997 of motor gasoline and distillate fuel oil imports are shown in Figure FE10. The 1997 MFW range and box for motor gasoline imports was the smallest over the past 5 years, ranging from -16.36 to 14.33. One outlier in April (14.33) was due to revisions. During 1997, there were 5 months that had resubmissions for *PSM* motor gasoline imports. Two of these months, July (-11.00) and October (6.19), were outliers due to revisions during those months.

Most of the 1997 MFW estimates for distillate fuel oil imports were underestimated. The range (19.29) of percent errors was the smallest over the 5-year period, ranging from -11.87 to 7.42 percent. During 1997, only one month had resubmissions occurring in November which made the *PSM* percent error an outlier (-8.00).

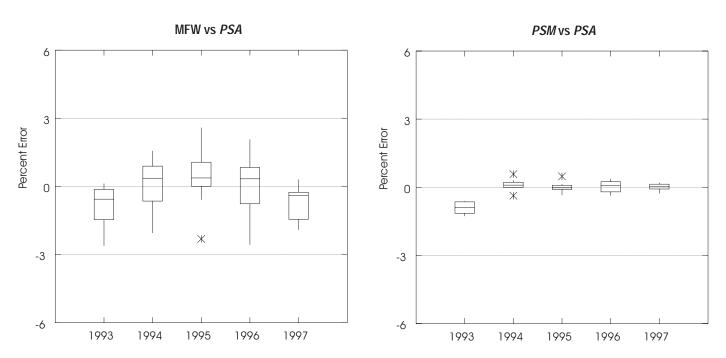
Figure FE11 shows the box and whisker plots for residual fuel oil imports and jet fuel imports. In contrast to prior years, more of the 1997 MFW estimates for residual fuel oil imports were overestimates. Over the 5-year period, 1997 had the largest range (54.62) and the first positive median (4.81). The range (23.79) for the *PSM* percent errors was the largest over the 5-year period, ranging from -10.78 to 13.01 percent. Four of the 5 resubmissions for 1997 *PSM* interim values were outliers: January, July, September, and November. The percent error in September (13.01) was the largest error over the 60 months studied. The ranges of the MFW and *PSM* residuel fuel oil percent errors were the largest of all plots analyzed in 1997.

Figure FE6. Range of Percent Errors for MFW and *PSM* Crude Oil Stocks Excluding Strategic Petroleum Reserve (SPR) and Motor Gasoline Stocks Data, 1993 -1997

Crude Oil Stocks Excluding SPR



Motor Gasoline Stocks

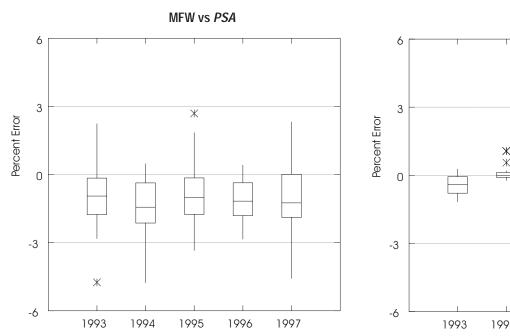


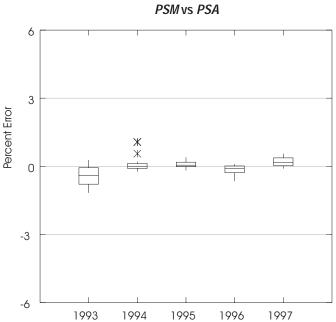
 $Source: \ \ Energy \ Information \ Administration, \ Petroleum \ Supply \ Reporting \ System.$

1997

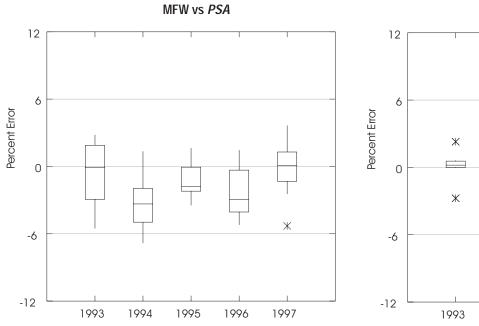
Figure FE7. Range of Percent Errors for MFW and PSM Distillate Fuel Oil and Residual Fuel Oil Stocks Data, 1993 - 1997

Distillate Fuel Oil Stocks





Residual Fuel Oil Stocks



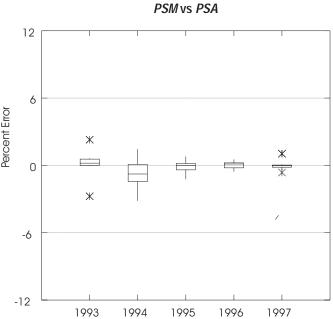
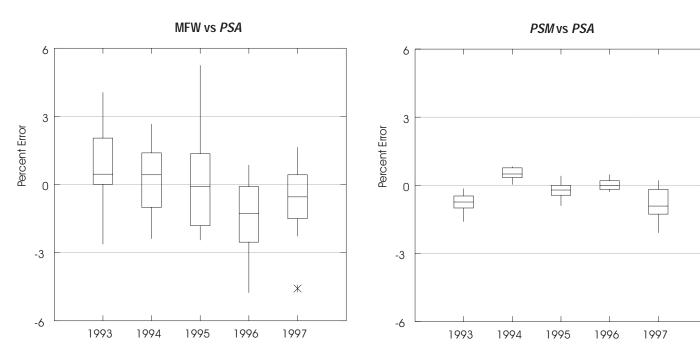


Figure FE8. Range of Percent Errors for MFW and *PSM* Jet Fuel Stocks and Propane Stocks Data, 1993 - 1997





Propane Stocks

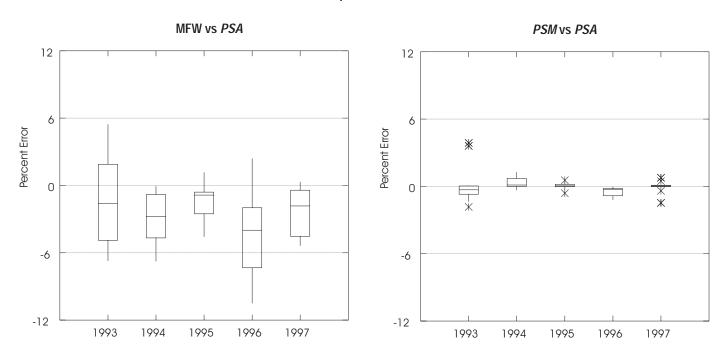
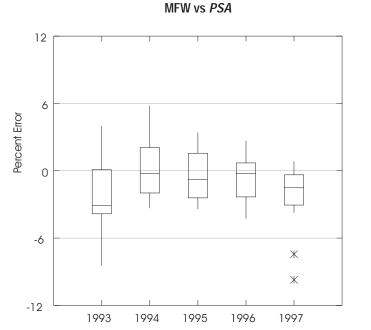
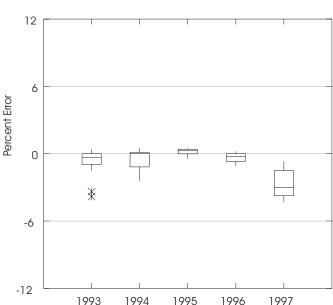


Figure FE9. Range of Percent Errors for MFW and *PSM* Crude Oil Imports Excluding SPR Data, 1993 - 1997





PSM vs PSA

Source: Energy Information Administration, Petroleum Supply Reporting System.

For 1997 MFW percent errors for jet fuel imports, it was the first year the box and whisker plot displayed a median greater than zero. This indicates that more MFW estimates were overestimated rather than underestimated. As in prior years, there were outliers in the 1997 *PSM* percent errors. The three resubmissions occurred in February, March, and October.

Conclusion

In summary, similar to previous years, the interim *PSM* data were closer in value to the final *PSA* volumes than the MFW estimates. This is largely a result of the longer time period provided to process the monthly data and monthly respondents' accounting systems.

In 1997, 45 of 66 *PSM* interim values were within 1 percent (mean absolute percent error) of the final values; 27 of 61 MFW estimates were within 2 percent (mean absolute percent error) of the final values; and 11 of those 27 were within 1 percent. As in previous years, the accuracy of 1997 preliminary and interim values varied by product and by petroleum supply type. As a group, stocks continued to have the most accurate MFW estimates and *PSM* interim values.

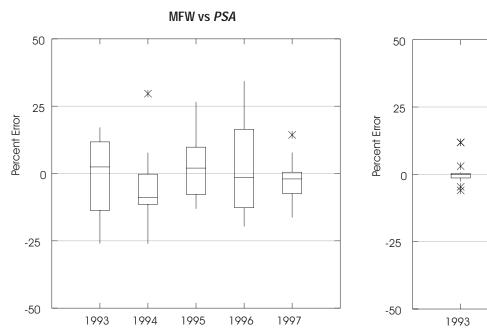
The good coverage for weekly surveys across petroleum supply type and product combinations has contributed to the accuracy of weekly estimates. In 1997, for 20 of the 21 categories, coverage was 90 percent or above. The decrease in response rates for the weekly and monthly surveys were the result of budget cuts at the respondent companies and EIA. However, this did not contribute to a decline in the accuracy of these data.

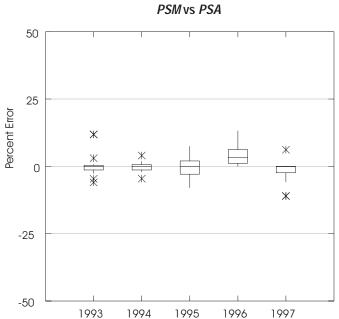
In December 1997, several key EIA personnel retired and other members of the Petroleum Division (PD) moved to other offices. This change combined with budget reductions produced increased workloads and decreased respondent and nonrespondent followup.

To successfully maintain and improve the accuracy of these data, the PD has made progress in its business re-engineering effort. The organization has been restructured to combine the Petroleum Supply Division and the Petroleum Marketing Division into the Petroleum Division to better serve customer needs, reduce expenditures, and improve efficiencies. In addition, a new group was created called the Collection and Dissemination Division (CDD). This reorganization facilitates major processes including "getting data in the door," survey management, editing, statistical methodology, analysis, publication, and customer outreach. A substantial effort has been made to develop and implement a Windows version of PEDRO, the electronic data collection method. This should contribute to the reduction of both respondent and EIA burden. Budget reductions will affect petroleum data dissemination. As a result of a customer survey, the EIA plans to eliminate EPUB in December 1998. Some other techniques being researched and developed are graphical data validation, optical scanning, and an improved automated data retrieval system, Survey Information System (SIS). Improvements are also being made in survey design, sampling, editing procedures, and edit parameters. The results of these efforts should enable the PD to continue to provide accurate weekly and monthly data estimates.

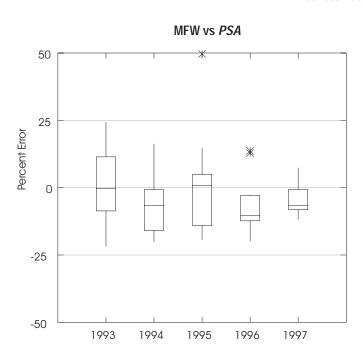
Figure FE10. Range of Percent Errors for MFW and *PSM* Motor Gasoline and Distillate Fuel Oil Imports Data, 1993 - 1997

Motor Gasoline Imports





Distillate Fuel Oil Imports



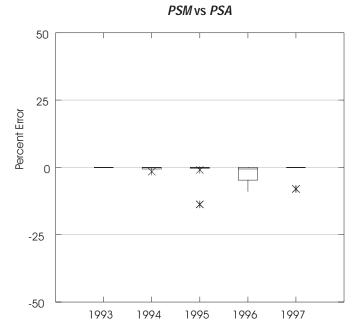
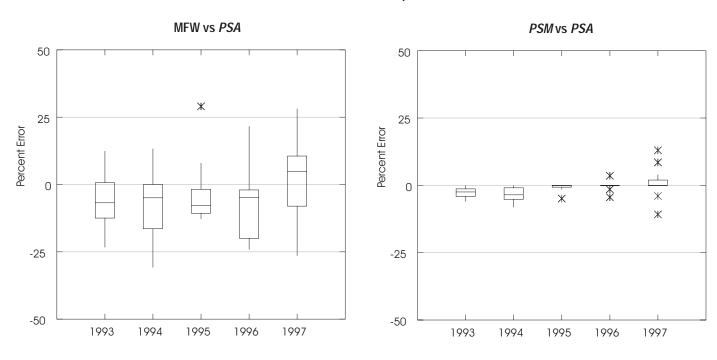
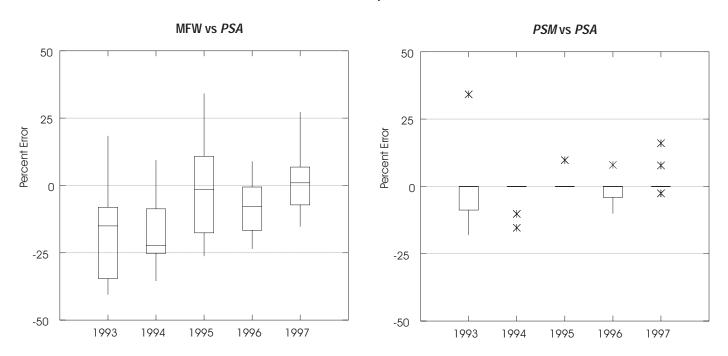


Figure FE11. Range of Percent Errors for MFW and *PSM* Residual Fuel Oil and Jet Fuel Imports Data, 1993 - 1997

Residual Fuel Oil Imports



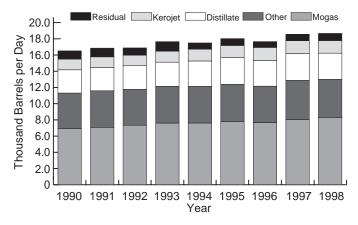
Jet Fuel Imports



Highlights

Total demand for refined petroleum products in September 1998¹ (measured as products supplied) averaged 18.7 million barrels per day, setting a new record for the month (Table & Figure H1). During the first 9 months of this year total demand for refined petroleum products has averaged 18.6 million barrels per day, close to the record set back in 1978.

Figure H1. Total Demand, 1990-Current, Comparison in September for Products



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

The Federal Reserve cut short-term interest rates at their September meeting in a preemptive move as growing concerns about the global economic slowdown have policy makers concerned about the effect on the U.S. economy. In a recent speech by Federal Reserve Governor Laurence Meyer, he pointed out that the domestic economy was still moving forward at a high level and that the Federal Reserve would work to sustain domestic growth. Data collected during September by the National Oceanic and Atmospheric Administration reveals that it was an usually hot month as temperatures averaged 35 percent warmer than normal and 33 percent warmer than this time last year. As the hurricane season got underway, the Gulf Coast was affected by tropical storms that shut in some production, caused problems with refinery operations and slowed down imports as some ships were unable to off load their cargos.

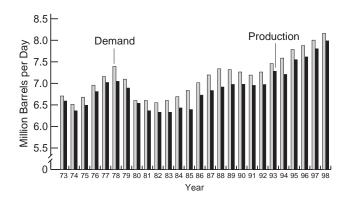
September 1998 and third quarter highlights include:

- Finished motor gasoline **demand** set a record high for the month, averaging 8.3 million barrels per day. January through September, demand is up almost 2 percent compared to last year's record for the same period (Figure H2). Since the beginning of the year, production has been at a record pace of 8.0 million barrels per day. **Stocks** of finished motor gasoline ended the month at 163.4 million barrels, more than 5.5 million barrels above last year's level.
- Distillate fuel oil demand averaged 3.2 million barrels per day, one the highest levels ever for the month. Demand for

distillate fuel oil since the beginning of the year has averaged 3.4 million barrels per day, a new record. **Production** of distillate fuel oil set a record high for the month at an average of 3.5 million barrels per day. Year-to-date production of distillate fuel oil is also at a record pace. Distillate fuel oil **stocks** ended the month totaling 152.2 million barrels, 13.5 million barrels above last year and the highest level for the month since 1986.

- Residual fuel oil demand reached the highest September level since 1993, averaging 878 thousand barrels per day.
 Production of residual fuel oil was also up for the month, averaging 737 thousand barrels per day. Year-to-date figures reflect increases for both demand and production of residual fuel oil. Stocks ended the month at 38.7 million barrels, the highest level for September since 1995.
- Kerosene-type jet fuel demand declined slightly from last September's level to an average of 1.6 million barrels per day. Kerosene-type jet fuel production was also below last September's level, averaging 1.5 million barrels per day. Both production and demand for kerosene-type jet fuel are down for the year. Kerosene-type jet fuel stocks ended the month totaling 44.4 million barrels.
- Propane inventories totaled 78.6 million barrels, the highest level to begin the heating season since 1986.
- Crude oil **production** remains similar to the levels in the 1950's, averaging only 6.3 million barrels per day. For the year, domestic production of crude oil is at it's lowest level since 1954. Alaskan field production dropped to 1.1 million barrels per day, the lowest level for the month in over 20 years. Crude oil **imports** averaged 8.4 million barrels per day, half a million barrels per day below the September 1997 record

Figure H2. Finished Motor Gasoline, Year-to-Date September Comparisons, 1973-1998



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

September 1998 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.

² "Fed To Cushion Coming U.S. Slowdown-Meyer", *Reuters*, October 5, 1998, accessible via the Internet at http://dailynews.yahoo.com/headlines/.

³ "Cooling Degree Day Data Monthly Summary, Monthly Data for September 1998", National Oceanic Atmospheric Administration, accessible via the Internet at http://nic.fb4.noaa.gov.

Table H1. Petroleum Supply Summary

(Million Barrels per Day, Except Where Noted)

		1998		1997	January - September		
Category	Estimated September	August	Difference ^a	September	1998	1997	
Products Supplied	18.7	19.1	-0.4	18.6	18.6	18.5	
Finished Motor Gasoline	8.3	8.5	-0.4	8.0	8.2	8.0	
	3.2	3.4					
Distillate Fuel Oil			-0.2	3.3	3.4	3.4	
Residual Fuel Oil	0.9	0.8	(s)	0.8	0.8	0.8 1.6	
Jet Fuel	1.6	1.5	(s)	1.6	1.5		
Other Petroleum Products ^b	4.7	4.8	-0.1	4.9	4.6	4.7	
Crude Oil Inputs	15.0	15.7	-0.7	15.3	15.0	14.6	
Operating Utilization Rate (%)	96.0	100.7	-4.7	100.4	97.1	96.1	
mports	10.2	10.8	-0.6	10.5	10.4	10.2	
Crude Oil	8.4	9.1	-0.8	8.8	8.6	8.2	
Strategic Petroleum Reserve	0.0	0.0	0.0	0.0	0.0	0.0	
Other	8.4	9.1	-0.8	8.8	8.6	8.2	
				1.7		2.0	
Products	1.8	1.7	0.2		1.8		
Finished Motor Gasoline	0.3	0.3	(s)	0.3	0.3	0.3	
Distillate Fuel Oil	0.2	0.2	(s)	0.2	0.2	0.2	
Residual Fuel Oil	0.2	0.2	(s)	0.1	0.2	0.2	
Jet Fuel	0.1	0.1	(s)	0.1	0.1	0.1	
Other Petroleum Products ^c	1.0	0.9	0.1	1.0	1.0	1.2	
Exports	1.0	0.8	0.2	1.0	1.0	1.0	
Crude Oil	0.1	0.1	0.1	0.1	0.1	0.1	
Products	0.9	0.7	0.2	0.9	0.8	0.9	
otal Net Imports	9.2	10.0	-0.8	9.5	9.4	9.2	
•	9.2	10.0	-0.6	9.5	9.4	9.2	
Stock Change ^d	-0.1	0.2	-0.3	0.7	0.4	0.3	
Crude Oil	-0.3	-0.3	(s)	0.1	0.1	0.1	
Products	0.3	0.5	-0.2	0.6	0.3	0.2	
Fotal Stocksmillion barrels)	1,654	1,672	-17	1,592	_	_	
Crude Oil	885	894	-8	867			
					_	_	
Strategic Petroleum Reserve	563	563	0	563	_	_	
Other	322	330	-8	304	_	_	
Products	769	778	-9	725	_	_	
Finished Motor Gasoline	163	169	-5 -5	158	_		
Distillate Fuel Oil	152		-5 2	139	_	_	
		150			_	_	
Residual Fuel Oil	39	42	-3	35	_	_	
Jet Fuel	44	47	-2	46	_	_	
Other Petroleum Products ^c	370	371	(s)	348	_	_	

^a Difference is equal to volume for current month minus volume for previous month.

Data for the current month are preliminary estimates, based on weekly submissions. For an explanation of estimation methodology and accuracy, see Appendix A of *Weekly Petroleum Status Report* and the article, "Accuracy of Petroleum Supply Data", published in the December 1997, *Petroleum Supply Monthly*.

b Includes crude oil product supplied, natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel.

^c Includes natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate fuel oil, and residual fuel oil.

^d A negative number indicates a decrease in stocks and a positive number indicates an increase.

 $⁽s) = Less than \ 0.05 \ million \ barrels \ per \ day, \ or \ less than \ 0.05 \ percent, \ or \ less than \ 0.5 \ million \ barrels.$

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), 1996, Petroleum Supply Annual, Volume II; appropriate issues of the Petroleum Supply Monthly and the Weekly Petroleum Status Report.

Table H2. U.S. Refinery Inputs, Capacities and Utilization Rates: 1997-1998 (Thousand Barrels per Day, Except Where Noted)

Item	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
item	Jan	reb	IVIAI	April	Iviay	Julie	July	Aug	Sept	OCI	NOV	Dec
1997												
Gross Refinery Inputs	13,771	13,601	14,156	14,465	15,232	15,300	15,190	15,465	15,533	15,127	14,939	15,188
Operating Refinery Capacity ²	15,168	15,205	15,233	15,229	15,449	15,461	15,462	15,452	15,464	15,464	15,452	15,424
Idle Capacity ³	284	247	399	387	167	177	177	189	139	139	150	204
Idle Three Months or Less	197	160	220	180	0	10	10	22	12	12	12	66
Idle More than Three Months	87	87	179	207	167	167	167	167	127	127	139	139
Operable Refinery Capacity	15,452	15,452	15,632	15,616	15,616	15,638	15,639	15,641	15,602	15,602	15,602	15,628
Utilization Rate (percent)												
Operating Capacity	90.8	89.5	92.9	95.0	98.6	99.0	98.2	100.1	100.4	97.8	96.7	98.5
Operable Capacity	89.1	88.0	90.6	92.6	97.5	97.8	97.1	98.9	99.6	97.0	95.7	97.2
1998												
Gross Refinery Inputs	14,655	14,340	14,851	15,170	15,305	15,651	15,704	15,806				
Operating Refinery Capacity ²	15,538	15,555	15,547	15,587	15,617	15,687	15,695	15,689				
Idle Capacity ³	167	158	184	144	144	135	135	143				
Idle Three Months or Less	41	20	46	0	0	0	0	14				
Idle More than Three Months	127	138	138	144	144	135	135	129				
Operable Refinery Capacity	15,705	15,713	15,732	15,732	15,761	15,822	15,830	15,832				
Utilization Rate (percent)												
Operating Capacity	94.3	92.2	95.5	97.3	98.0	99.8	100.1	100.7				
Operable Capacity	93.3	91.3	94.4	96.4	97.1	98.9	99.2	99.8				

¹Capacities are on a calendar day basis.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA), 1997, Petroleum Supply Annual, Volume 2, Table 16; EIA, Petroleum Supply Monthly, 1998 data issue, Table 28.

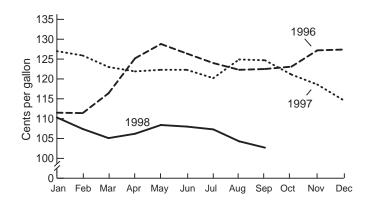
high for the month. Since the beginning of the year crude oil imports are averaging 8.6 million barrels per day, a new record. Crude oil **stocks**, excluding the Strategic Petroleum Reserve (SPR), ended the month at 321.8 million barrels.

Motor Gasoline

As the summer driving season came to an end, consumers were treated to the lowest prices yet this year for conventional motor gasoline. The retail price for conventional motor gasoline averaged \$1.027 a gallon (including taxes), 22 cents less than last September (Figure H3). Travel during the Labor Day weekend, traditionally viewed as the end of the summer driving season, was estimated to have increased 5 percent from last year as 33.1 million travelers took to the roads for the holiday weekend. Motor gasoline **demand** set a record high for the month, at an average of 8.3 million barrels per day. **Demand for the year is up nearly 2 percent** from the record set last year, averaging 8.2 million barrels per day. Due to refineries going into turnarounds, production of finished motor gasoline was down for the month. Production of finished motor gasoline averaged 8.1 million barrels per day, less than 80 thousand barrels per day below the September record.

Over the first nine months of the year, production of finished motor gasoline averaged 8.0 million barrels per day, a new record. **Imports** of finished motor gasoline were normal for this time of

Figure H3. Prices for Conventional Motor Gasoline (including taxes), 1996-current



Source: Energy Information Administration, Weekly Petroleum Status Report, DOE/EIA-0208 (various issues).

²Operating capacity equals the operable capacity less the total idle capacity.

³ Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.

⁴ "Table 16. U.S. Retail Motor Gasoline and On-Highway Diesel Fuel Prices, 1997 to Present", Weekly Petroleum Status Report, September 25, 1998, p. 27.

⁵ "Falling Gasoline Prices Pump Up Holiday Demand", Oxy-Fuels News Monthly Markets Update, September 14, 1998, p. 1.

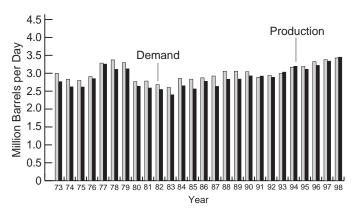
⁶ "Gasoline Supply Barometer", *Oil Express*, September 28, 1998, p. 2.

year averaging 321 thousand barrels per day. Imports of finished motor gasoline this year have averaged 301 thousand barrels per day, down from last year's level. Finished motor gasoline **stocks** ended the month 5.5 million barrels above last September's level, totaling 163.4 million barrels.

Distillate Fuel Oil

Demand for distillate fuel oil averaged 3.2 million barrels per day for the month, close to the September record. For the year, demand is at a record pace, averaging 3.4 million barrels per day (Figure H4). Production of distillate fuel oil received a boost as some refineries increased the yield of low-sulfur distillates or downgraded kerosene-type fuel as two airline strikes during the month lowered demand for kerosene-type jet fuel. Production of distillate fuel oil set a new September record, averaging 3.5 million barrels per day. Since the beginning of the year, distillate fuel oil production has averaged 3.4 million barrels per day, a new record. **Imports** of distillate fuel oil were normal for the month, averaging 191 thousand barrels per day. For the year, imports are averaging 192 thousand barrels per day, slightly below last year's level. Total stocks of distillates ended the month 13.5 million barrels higher than this time last year. Distillate fuel oil stocks ended the month totaling 152.2 million barrels. Of these stocks, heating oils or high-sulfur distillates accounted for 78.5 million barrels, nearly 13 percent higher than last September.

Figure H4. Distillate, Year-to-Date September Comparisons, 1973-1998



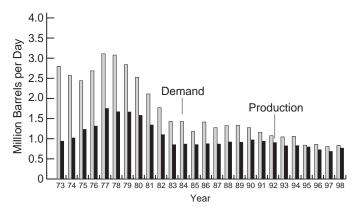
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Residual Fuel Oil

Residual fuel oil **production** reached the highest level for the month since 1995, at an average of 737 thousand barrels per day. **Demand** for residual fuel oil averaged 878 thousand barrels per day, the highest level for September since 1993. Year-to-date figures for residual fuel oil reflect increases in both demand and production over last year (Figure H5). This year, demand for residual fuel oil has averaged 834 thousand barrels per day and production has averaged 768 thousand barrels per day. Residual fuel oil **imports** were the highest September in 5 years averaging

223 thousand barrels per day. End-of-month **stocks** totaled 38.7 million barrels, the highest level for September since 1995.

Figure H5. Residual, Year-to-Date September Comparisons, 1973-1998



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

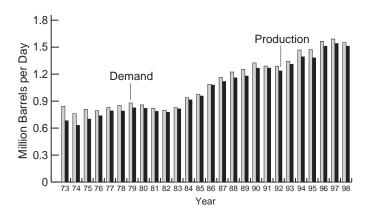
Kerosene-Type Jet Fuel

The recent strike by Northwest Airlines combined with the job walk off by the Air Canada pilots early in the month took some of the air out of kerosene-type jet fuel demand in September.

Demand for kerosene-type jet fuel averaged 1.6 million barrels per day, a slight decline from last year's level. With the expected decline in demand due to the problems in the airline industry, production was cut back during the month.

Production of kerosene-type jet fuel averaged 1.5 million barrels per day in September, just shy of last year's level. Since the first of the year, demand for kerosene-type jet fuel has averaged 1.6 million barrels and production 1.5 million barrels per day, both down from their respective highs (Figure H6). Total imports of jet fuel, kerosene

Figure H6. Kerojet, Year-to-Date September Comparisons, 1973-1998



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

⁷ "Strike Creates Turbulence in Jet Fuel Market", *The Oil Daily*, September 8, 1998, p. 1 & 10.

^{8 &}quot;September Presents Challenge For Oil", Oil Price Information Service, September 7, 1998, p. 1.

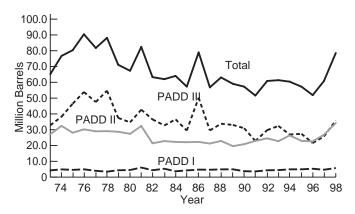
⁹ "Market Firm To Despite Strike", Oil Price Information Service, September 14, 1998, p. 15.

and naphtha-type, are down for the year at an average of 74 thousand barrels per day and averaging only 62 thousand barrels per day in September. Kerosene-type jet fuel **stocks** ended the month at 44.4 million barrels, 1.2 million barrels below last September.

Propane

Propane inventories increased a September record 6.0 million barrels to end the month totaling 78.6 million barrels (Figure H7). U.S. propane inventories will start the beginning of the 1998-99 heating season 17.8 million barrels higher than last year and at the highest level for the month since 1986. Moreover, the final summer stock build measured a record 48.7 million barrels, nearly 15 million barrels higher than the 5-year average of 33.8 million barrels.

Figure H7. Propane Stocks, Year-to-Year September Comparisons, 1973-1998



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

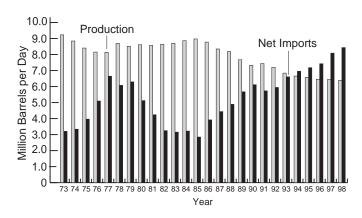
Regionally, stocks showed increases in all major regions during the month. Inventories in the Midwest increased 3.1 million barrels to end the month at 34.2 million barrels. Along the Gulf Coast, inventories increased 3.0 million barrels, for a total of 35.8 million barrels, while propane inventories along the East Coast added another 0.5 million barrels to end the month at 5.7 million barrels. Inventories in both the Midwest and Gulf Coast remained significantly above their respective normal ranges, while East Coast inventories remained moderately above normal.

Crude Oil

Despite the hurricane activity in the Gulf which disrupted production, crude oil production remained relatively flat, increasing only slightly during the month. Domestic crude oil **production** averaged 6.3 million barrels per day, the lowest level for the month since 1954. So far in 1998, domestic production has

averaged 6.4 million barrels per day, the **lowest level for this time** period in 44 years (Figure H8). Field production of crude oil in Alaska averaged 1.1 million barrels per day, the lowest level for September in over 20 years. The decline in crude oil output from Alaska continues the trend starting in 1989. This year, production has averaged only 1.2 million barrels per day, the lowest level for this time period since 1977. Making up for the decline in domestic production, **net imports** of crude oil remain strong, averaging 8.4 million barrels per day. Two major U.S. ports were affected by the tropical storms during September, possibly keeping imports from establishing a new record high for the month. 11 Since the start of the year, crude oil imports have been at a record pace, averaging 8.6 million barrels per day, over 4 percent ahead of last year. Net imports, gross imports minus exports, of crude oil averaged 8.3 million barrels per day in September and have set a record for the year at an average of 8.4 million barrels per day.

Figure H8. Crude Oil, Year-to-Date September Comparisons, 1973-1998,
Production and Net Imports



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Excluding the SPR, crude oil **stocks** totaled 321.8 million barrels by the end of the month. This represents the highest level for this time of year since 1994 and nearly 6 percent higher than last September's month end level. Total crude oil stocks, including the SPR, ended the month nearly 18 million barrels above this time last year. Total crude oil stocks ended the month at 885.2 million barrels.

Refinery Operations

During September, crude oil **inputs** averaged 15.0 million barrels per day, close to the September record established last year. U.S. refineries are running at a record pace this year, crude inputs are averaging 15.0 million barrels per day. During the month, the estimated refinery **operable utilization rate** averaged 95.1 percent verses 99.6 percent last year.

^{10 &}quot;BN 10/1 Crude Oil Falls Amid Ample Supplies, Even With Storms (Update2)", Bloomberg, October 2, 1998, accessible via the Internet at http://www.bloomberg.com/.

^{11 &}quot;Gulf Spot Oil Prices Follow Futures Higher; Prospect of More Crude Imports Hurts LLS", The Oil Daily, September 14, 1998, p. 4.

Table S1. Crude Oil and Petroleum Products Overview, 1982 - Present

Vear/Month			Field Production	n	Stock	Change ^a		Ending Stocks (Million Barrels
1983 Average	Year/Month	Total Domestic ^c		Gas Plant	Crude Oil ^d		Products	Crude Oil ^d and Petroleum Products
1985 Average 10.554 8.879 1,630 199 81 15,726 1985 Average 10.636 8,971 1,609 50 153 15,726 1986 Average 10.289 8,680 1,551 78 124 16,281 1987 Average 10,008 8,349 1,595 128 -87 16,665 1988 Average 9,818 8,140 1,625 1 2-29 17,283 1988 Average 9,818 8,140 1,625 1 2-29 17,283 1989 Average 9,819 8,761 7,613 1,514 6 86 1-29 17,225 1990 Average 8,994 7,355 1,559 -35 142 16,988 1991 Average 9,9168 7,417 1,659 -42 32 16,714 1992 Average 8,996 7,171 1,697 -1 -68 17,033 9 1994 Average 8,896 7,171 1,697 -1 -68 17,033 9 1995 Average 8,864 6,662 1,727 18 9-2 17,718 9 1995 Average 8,646 6,662 1,727 18 9-2 17,718 9 1995 Average 8,666 6,560 1,762 -93 1.55 17,725 9 1995 Average 8,666 6,560 1,762 -93 1.55 17,725 9 1996 January 8,558 6,577 1,680 -63 1,454 18,620 March 8,718 6,571 1,814 132 464 18,620 March 8,718 6,571 1,814 132 464 18,620 March 8,859 6,577 1,680 -63 1,454 18,620 March 8,859 6,580 1,866 2 5 76 7,957 1	1982 Average	10,252	8,649	1,550			15,296	^g 1,430
1985 Average 10,836 8,971 1,699 50 153 15,726 1986 Average 10,289 8,680 1,551 78 124 16,228 1987 Average 10,008 8,349 1,595 128 -87 16,665 1988 Average 9,818 8,140 1,625 1 -29 17,283 1989 Average 9,818 8,140 1,625 1 -29 17,283 1989 Average 9,219 7,613 1,546 86 129 17,325 1990 Average 8,994 7,355 1,559 -35 142 16,988 1991 Average 9,168 7,417 1,659 -42 32 16,714 1992 Average 8,896 7,171 1,697 -1 -88 17,033 9 1992 Average 8,896 7,171 1,697 -1 -88 17,033 9 1994 Average 8,864 6,862 1,727 18 9 -2 2 2 17,718 9 1995 Average 8,645 6,662 1,727 18 9 -2 2 2 17,718 9 1995 Average 8,645 6,662 1,727 18 9 -2 2 17,718 9 1995 Average 8,646 6,695 1,762 -93 -153 17,725 9 1996 January 8,564 6,495 1,716 -8 -592 18,261 February 8,568 6,577 1,880 -63 1,454 18,620 March 8,718 6,571 1,814 132 -464 18,301 April 8,597 6,444 1,845 29 633 17,885 14,000 19,000		,	,				,	1,454
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Average 8,611 6,452 1,817 51 93 18,620 998 January E 8,644 E 6,438 1,826 522 -64 18,256 February E 8,759 E 6,538 1,870 49 -169 18,322 March E 8,608 E 6,465 1,846 457 59 18,393 April E 8,656 E 6,484 1,859 492 358 18,624 May E 8,515 E 6,384 1,808 47 1,247 17,876 June E 8,466 E 6,290 1,734 -656 642 18,818 July E 8,295 E 6,322 1,580 200 152 19,140 August R8 8,368 RE 6,276 R 1,713 R -293 R 517 R 19,108 R September* E 8,435 PE 6,299 E 1,703 E -338 E 268 E 18,661 E 9-Mo. Average E 8,525 Fe 6,387 E 1,770 E 56 E 339								1,560
February		,	,					_
February E 8,759	998 January	E 8.644	E 6.438	1.826	522	-64	18.256	1,576
March E 8,608 E 6,465 1,846 457 59 18,393 April E 8,656 E 6,484 1,859 492 358 18,624 May E 8,515 E 6,384 1,808 47 1,247 17,876 June E 8,466 E 6,290 1,734 -656 642 18,818 July E 8,295 E 6,322 1,580 200 152 19,140 August RE 8,368 RE 6,276 R 1,713 R -293 R 517 R 19,108 R September* E 8,435 PE 6,299 E 1,703 E -338 E 268 E 18,661 E 9-Mo. Average E 8,525 PE 6,387 E 1,770 E 56 E 339 E 18,579		[∟] 8 759	^E 6,538	,			,	1,572
April E 8,656 E 6,484 1,859 492 358 18,624 May E 8,515 E 6,384 1,808 47 1,247 17,876 June E 8,466 E 6,290 1,734 -656 642 18,818 July E 8,295 E 6,322 1,580 200 152 19,140 August RE 8,368 RE 6,276 R 1,713 R -293 R 517 R 19,108 R September* E 8,435 PE 6,299 E 1,703 E -338 E 268 E 18,661 E 9-Mo. Average E 8,525 PE 6,387 E 1,770 E 56 E 339 E 18,579		[⊨] 8.608	E 6 465					1,588
May E 8,515 E 6,384 1,808 47 1,247 17,876 June E 8,466 E 6,290 1,734 -656 642 18,818 July E 8,295 E 6,322 1,580 200 152 19,140 August RE 8,368 RE 6,276 R 1,713 R -293 R 517 R 19,108 R September* E 8,435 PE 6,299 E 1,703 E -338 E 268 E 18,661 E 9-Mo. Average E 8,525 PE 6,387 E 1,770 E 56 E 339 E 18,579		E 8,656	E 6,484					1,614
June E 8,466 E 6,290 1,734 -656 642 18,818 July E 8,295 E 6,322 1,580 200 152 19,140 August RE 8,368 RE 6,276 R 1,713 R -293 R 517 R 19,108 R September* E 8,435 PE 6,299 E 1,703 E -338 E 268 E 18,661 E 9-Mo. Average E 8,525 PE 6,387 E 1,770 E 56 E 339 E 18,579		E 8 515	[⊏] 6 384				,	1,654
July E 8,295 E 6,322 1,580 200 152 19,140 August RE 8,368 RE 6,276 R 1,713 R -293 R 517 R 19,108 R September* E 8,435 PE 6,299 E 1,703 E -338 E 268 E 18,661 E 9-Mo. Average E 8,525 PE 6,387 E 1,770 E 56 E 339 E 18,579		E 8.466	E 6.290					1,654
August RE 8,368 RE 6,276 R 1,713 R -293 R 517 R 19,108 R 19,108 R 1,703 R 19,108		E 8.295	[∟] 6.322	1 580	200	152	19.140	1 665
September*		RE 8.368	KE 6 276	R 1 713	R ₋ -293	^R 517	R 19 108	R _{1 672}
9-Mo. Average ^E 8,525	September*	[∟] 8,435	PE 6.299	[□] 1.703	± -338	± 268	[∟] 18.661	E 1,654
007.0 Ma. Augusta	9-Mo. Average	[∟] 8,525	PE 6,387	[∟] 1,770	[∟] 56	[∟] 339	[∟] 18,579	_
997 9-Mo. Average 8,609 6,440 1,832 64 247 18,502	997 9-Mo. Average	8,609	6,440	1,832	64	247	18,502	_

Footnotes continued on following page.

a A negative number indicates a decrease in stocks and a positive number indicates an increase.
 b Stocks are totals as of end of period.

c Includes crude oil, natural gas plant liquids, and other liquids. Beginning in 1993, fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants are also included.

Includes stocks located in the Strategic Petroleum Reserve.

e Includes crude oil for storage in the Strategic Petroleum Reserve.

f Net Imports equal Imports minus Exports.

⁹ In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 4.

Table S1. Crude Oil and Petroleum Products Overview, 1982 - Present (Continued)

		Imports			Exports	1	
Year/Month	Total	Crude Oil ^e	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports
982 Average	5,113	3,488	1,625	815	236	579	4,298
83 Average	5,051	3,329	1,722	739	164	575	4,312
84 Average	5,437	3,426	2,011	722	181	541	4,715
85 Average	5,437	3,201	1,866	781	204	577	4,286
86 Average	6,224	4,178	2,045	785	154	631	5,439
87 Average	6,678	4,674	2,004	764	151	613	5,914
88 Average	7,402	5,107	2,295	815	155	661	6,587
89 Average	8,061	5,843	2,217	859	142	717	7,202
ū	,	,	2,123	857	109	748	
3	8,018	5,894	,				7,161
91 Average	7,627	5,782	1,844	1,001	116	885	6,626
92 Average	7,888	6,083	1,805	950	89	861	6,938
93 Average	8,620	6,787	1,833	1,003	98	904	7,618
94 Average	8,996	7,063	1,933	942	99	843	8,054
95 Average	8,835	7,230	1,605	949	95	855	7,886
96 January	9,364	7,303	2,061	1,070	89	981	8,294
February	8,390	6,612	1,778	1,048	92	956	7,342
March	9,092	7,215	1,877	867	94	773	8,225
April	9,429	7,371	2,058	976	148	828	8,453
May	10,007	8,029	1,977	891	37	854	9,116
June	9,938	7,958	1,980	895	130	766	9,043
July	9,820	7,800	2,020	945	139	806	8,876
August	9,986	8,041	1,944	896	44	852	9,090
			,			957	
September	9,142	7,353	1,789	1,104	147		8,038
October	9,837	7,701	2,136	1,045	134	911	8,792
November	9,244	7,344	1,900	1,024	172	852	8,220
December	9,417	7,307	2,110	1,013	96	917	8,404
Average	9,478	7,508	1,971	981	110	871	8,498
97 January	9,763	7,492	2,271	1,038	141	897	8,725
February	9,561	7,434	2,127	1,017	229	787	8,544
March	9,833	7,754	2,079	933	136	796	8,900
April	10,114	7,987	2,127	937	92	845	9,177
May	10,818	8,653	2,165	876	26	851	9,941
June	10,736	8,759	1,978	955	57	898	9,782
July	10,008	8,178	1,830	1,012	70	942	8,996
August	10,465	8,621	1,844	1,074	110	964	9,390
September	10,537	8,840	1,697	997	122	875	9,540
October	10,792		,	1,066	152	914	
	9,948	8,927	1,865	,	32	901	9,726
November		8,366	1,582	934			9,014
December	9,328	7,653	1,675	1,197	131	1,066	8,130
Average	10,162	8,225	1,936	1,003	108	896	9,158
98 January	9,893	8,185	1,708	1,083	231	852	8,811
February	9,577	7,770	1,807	957	197	760	8,620
March	9,694	7,989	1,705	919	99	820	8,775
April	10,398	8,523	1,874	1,029	163	866	9,369
May	10,903	8,957	1,945	1,027	144	883	9,876
June	10,702	8,725	1,977	987	63	924	9,715
July	11 151	9.309	1 842	998	104	894	10 152
August	R 10,829	R 9.143	R 1.686	R 780	R 51	R 729	R _{10,049}
September*	E 10,217	E 8,378	□ 1 8.3.9	± 988	E 104	± 883	E 9,229
	E 10,382	E 8,562	E 1,820	E 974	E 128	E 846	E 9,408
9-Mo. Average							
97 9-Mo. Average	10,208	8,195	2,013	982	108	874	9,226

Footnotes continued.

R = Revised data. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

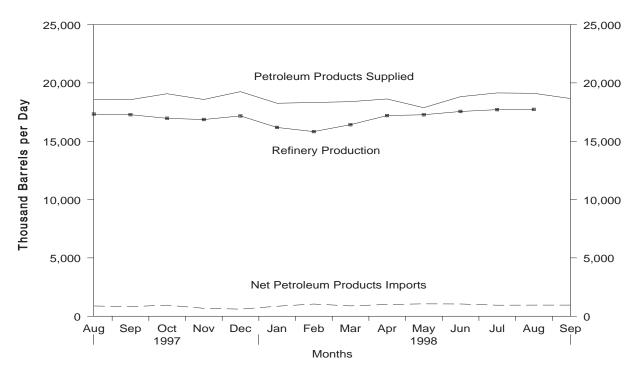
^{— =} Not Applicable.

^{*} See Summary Statistics Explanatory Note 1.

Notes: • Crude oil includes lease condensate. • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

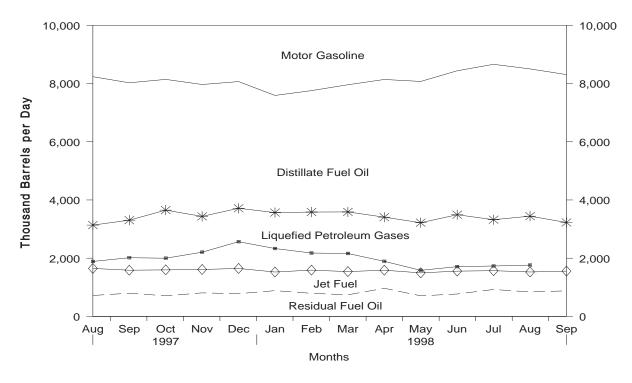
Source: See Summary Statistics Table and Figure Sources.

Figure S1. Petroleum Overview, August 1997 - Present



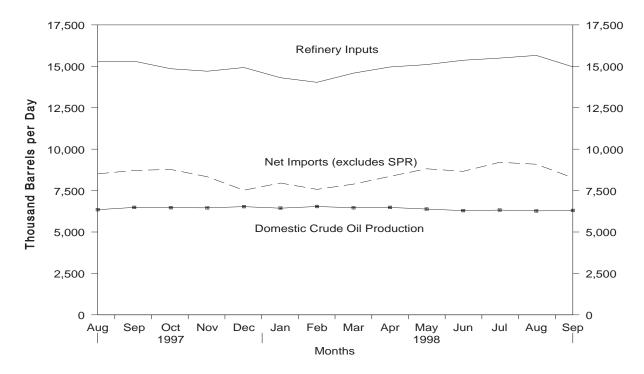
Source: Energy Information Administration, Petroleum Supply Monthly, Table S1. See Summary Statistics Table and Figure Sources.

Figure S2. Petroleum Products Supplied, August 1997 - Present



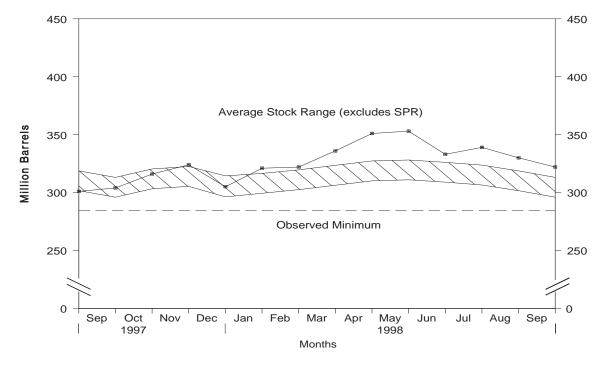
Source: Energy Information Administration, *Petroleum Supply Monthly*, Tables S4-S7, and S9. See Summary Statistics Table and Figure Sources.

Figure S3. Crude Oil Supply and Disposition, August 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S2. See Summary Statistics Table and Figure Sources.

Figure S4. Crude Oil Ending Stocks, August 1997 - Present



¹Excludes stocks held in the Strategic Petroleum Reserve (SPR). Note: The Observed Minimum for crude oil stocks in the last 36-month period was 284.7 million barrels, occurring in December 1996. Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S2. See Summary Statistics Table and Figure Sources.

Table S2. Crude Oil Supply and Disposition, 1982 - Present

				Su	pply			Disposition
		Field Pr	oduction		Imports			
	Year/Month	Total Domestic	Alaskan	Total	SPR	Other	Unaccounted for Crude Oil ^c	Crude Losses
								_
982	Average	8,649	1,696	3,488	165	3,323	71	3
983	Average	8,688	1,714	3,329	234	3,096	114	2
984	Average	8,879	1,722	3,426	197	3,229	185	2
985	Average	8,971	1,825	3,201	118	3,083	145	1
986	Average	8,680	1,867	4,178	48	4,130	139	(s)
87	Average	8,349	1,962	4,674	73	4,601	145	(s)
88	Average	8,140	2,017	5,107	51	5,055	196	(s)
989	Average	7,613	1,874	5,843	56	5,787	200	(s)
990	Average	7,355	1,773	5,894	27	5,867	258	(s)
991	Average	7,417	1,798	5,782	0	5,782	195	(s)
992	Average	7,171	1,714	6,083	10	6,073	258	(s)
993	Average	6,847	1,582	6,787	15	6,772	168	(s)
94	Average	6,662	1,559	7,063	12	7,051	266	(s)
95	Average	6,560	1,484	7,230	0	7,230	193	(s)
96	January	6,495	1,444	7,303	0	7,303	20	0
	February	6,577	1,482	6,612	Ō	6,612	413	0
	March	6,571	1,454	7,215	0	7,215	-25	0
	April	6,444	1,367	7,371	Ō	7,371	665	(s)
	May	6,394	1,341	8,029	Ō	8,029	61	0
	June	6,458	1,419	7,958	Ō	7,958	594	0
	July	6,338	1,317	7,800	0	7,800	121	(s)
	August	6,360	1,327	8,041	Ö	8,041	54	0
	September	6,482	1,401	7,353	Ö	7,353	303	Ö
	October	6,481	1,379	7,701	0	7,701	420	0
	November	6,476	1,403	7,344	Õ	7,344	148	Ö
	December	6,506	1,392	7,307	0	7,307	-153	Ö
	Average	6,465	1,393	7,508	Ö	7,508	215	(s)
97	January	6,402	1,380	7,492	0	7,492	378	0
	February	6,514	1,384	7,434	0	7,434	-350	0
	March	6,452	1,331	7,754	Ō	7,754	501	Ō
	April	6,441	1,330	7,987	0	7,987	167	0
	May	6,474	1,303	8,653	Ö	8,653	257	Ö
	June	6,442	1,260	8,759	Ö	8,759	-170	Ö
	July	6,409	1,238	8,178	0	8,178	136	0
	August	6,347	1,200	8,621	Õ	8,621	130	ő
	September	6,486	1,276	8,840	Õ	8,840	199	Ő
	October	6,467	1,286	8,927	0	8,927	5	0
	November	6,459	1,278	8,366	Ö	8,366	164	Ö
	December	6,531	1,290	7,653	0	7,653	267	0
	Average	6,452	1,296	8,225	0	8,225	145	0
98	January	E 6,438	E 1,229	8,185	0	8,185	441	0
	February	^E 6 538	¹ 1 238	7,770	0	7,770	-27	0
	March	^E 6 465	¹ 1 221	7,989	0	7,989	692	0
	April	^E 6.484	[∟] 1.200	8,523	0	8,523	609	0
	May	⁻ 6.384	⁻ 1 173	8,957	0	8,957	-46	0
	June	^E 6.290	[⊑] 1.135	8,725	0	8,725	-240	0
	July	^E 6.322	^E 1.155	9.309	0	9.309	170	(s)
	August	RE 6 276	^{RE} 1 133	R 9.143	0	R 9.143	R (s) E <i>61</i>	0
	September*	PE 6.299	PE 1.093	[∟] 8.378	E 0	[∟] 8.378	E 61	Eο
	9-Mo. Average	PE 6,387	PE 1,175	E 8,562	E 0	E 8,562	E 187	E (s)
97	9-Mo. Average	6,440	1,299	8,195	0	8,195	145	0
96	9-Mo. Average	6,457	1,394	7,527	0	7,527	241	(s)

Stocks are totals as of end of period.

b A negative number indicates a decrease in stocks and a positive number indicates an increase.

Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50 thousand barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

Previously published as crude used directly.

e Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4. Footnotes continued on following page.

Table S2. Crude Oil Supply and Disposition, 1982 - Present (Continued)

				Disposition			Enaing	Stocks ^a (Millio	on Barreis)
		Stock (Change ^b						
	Year/Month	SPR	Other	Refinery Inputs	Exports	Product Supplied	Total	SPR	Other Primary
982	Average	174	-38	11,774	236	^d 59	^e 644	294	^e 350
983	Average	234	e -20	11,685	164	66	723	379	344
984	Average	195	4	12,044	181	64	796	451	345
985	Average	117	-67	12,002	204	60	814	493	321
986	Average	50	28	12,716	154	49	843	512	331
87	Average	80	49	12,854	151	34	890	541	349
88	Average	52	-51	13,246	155	40	890	560	330
989	Average	56	30	13,401	142	28	921	580	341
990	Average	16	-51	13,409	109	24	908	586	323
91	Average	-47	5	13,301	116	18	893	569	325
992	Average	17	-18	13,411	89	13	893	575	318
993	Average	34	47	13,613	98	10	922	587	335
994	Average	13	5	13,866	99	9	929	592	337
95	Average	(s)	-93	13,973	95	7	895	592	303
996	January	(s)	-8	13,728	89	11	895	592	303
	February	(s)	-62	13,564	92	8	893	592	301
	March	-80	-52	13,793	94	7	889	589	300
	April	-88	117	14,295	148	6	890	586	303
	May	-22	24	14,439	37	7	890	586	304
	June	-45	350	14,569	130	6	899	584	314
	July	-50	-194	14,359	139	5	891	583	308
	August	-172	153	14,424	44	6	891	578	313
	September	-130	-368	14,484	147	6	876	574	302
	October	-1	187	14,277	134	5	882	574	308
	November	-127	-288	14,204	172	5	869	570	299
	December	-129	-498	14,185	96	6	850	566	284
	Average	-71	-53	14,195	110	6	_	_	_
97	January	-75	537	13,664	141	5	864	563	301
	February	(s)	-121	13,485	229	6	861	563	297
	March	(s)	520	14,047	136	5	877	563	313
	April	(s)	197	14,303	92	3	883	563	319
	May	(s)	230	15,123	26	4	890	563	326
	June	(s)	-199	15,170	57	2	884	563	320
			-343	14,994	70	2	873	563	310
	July	(s)	-283	15,271	110	(s)	864	563	301
	August September	(s) (s)	-203 95	15,308	122	(s)	867	563	304
	October	(s)	393	14,854	152	0	879	563	316
	November	()	252	14,706	32	0	887	563	324
	December	(s)							
	Average	(s) -7	-607 57	14,928 14,662	131 108	0 2	868 —	563 —	305
98		(c)	522	14,313	231	0	884	563	321
30	January	(s)	522 50	,	197	0	886	563	321
	February	(s) 0	457	14,034 14,590	99	0	900	563	336
	March	0	492	14,590	163	0	900 915	563	350 351
	. !		492	15,104	144	0	916	563	353
	May June	(s)				0			
		(s)	-656 201	15,368	63 104	0	896 903	563 563	333 339
	July	(s) R ₀	R -293	15,496 R 15,660	R 51	0	R 894	563 563	R 339
	August	_E 0	E -338	E 14,971	E 104	<u> </u>	E 885	E 563	E 322
	September* 9-Mo. Average	E (s)	E 56	E 14,953	E 128	E 0	-		322
97	9-Mo. Average	-9	73	14,605	108	3	_	_	_

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate. SPR = Strategic Petroleum Reserve.

^{— =} Not Applicable.

^{*} See Summary Statistics Explanatory Note 1.

Notes: • Crude oil includes lease condensate. • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present

(Thousand Barrels per Day)

					Imports from Aral	b-OPEC Source	es		
	Year/Month	AI	geria	ı	Iraq	Ku	wait ^b	L	ibya
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1982	Average	170	90	3	3	5	2	26	23
1983	Average	240	176	10	10	14	7	0	0
1984	Average	323	194	12	12	36	24	1	0
1985	Average	187	84	46	46	21	4	4	0
1986	Average	271	78	81	81	68	28	0	0
1987	Average	295	115	83	82	84	70	0	0
1988	Average	300	58	345	343	92	80	0	0
1989	Average	269	60	449	441	157	155	0	0
1990	Average	280	63	518	514	86	79	0	0
1991	Average	253	44 24	0	0	6	6	0 0	0
1992 1993	Average	196 220	24	0 0	0 0	51 353	39 344	0	0 0
1994	Average	243	21	0	0	312	344 307	0	0
1995	Average Average	234	27	0	0	218	213	0	0
1006	lonuony	212	20	0	0	140	1.45	0	0
1996	January February	313 200	38 16	0	0 0	148 216	145 216	0	0
	March	241	38	0	0	127	127	0	0
	April	211	2	0	Ö	201	201	0	0
	May	340	0	0	Ö	230	230	0	0
	June	313	Ö	Ö	Ö	388	388	Ö	Ö
	July	305	0	0	0	266	266	0	0
	August	323	Ō	Ō	0	271	266	Ö	Ō
	September	186	0	0	0	236	236	0	0
	October	209	0	0	0	260	260	0	0
	November	214	3	0	0	228	228	0	0
	December	214	0	14	14	262	262	0	0
	Average	256	8	1	1	236	235	0	0
1997	January	282	0	0	0	209	209	0	0
	February	319	0	0	0	172	172	0	0
	March	309	0	35	35	315	315	0	0
	April	320	23	84	84	204	204	0	0
	May	290	0	102	102	128	128	0	0
	June	349	0	115	115	361	361	0	0
	July	291	0	88	88	331	331	0	0
	August	261 259	4 6	(s) 0	(s) 0	229 322	229 322	0 0	0
	September October	259 272	3	177	177	322 349	322 349	0	0
	November	267	3 7	220	220	220	220	0	0
	December	208	28	240	240	188	188	0	0
	Average	285	6	89	89	253	253	ŏ	ŏ
1998	January	306	9	36	36	194	194	0	0
	February	295	7	0	0	283	283	0	0
	March	244	13	127	127	307	307	Ö	Ö
	April	336	0	233	233	262	262	Ö	Ö
	May	330	16	137	137	399	399	0	0
	June	362	31	270	270	275	275	0	0
	July	308	26	277	277	435	435	0	0
	August	264	10	713	713	273	273	0	0
	8-Mo. Average	305	14	227	227	304	304	0	0
1997	8-Mo. Average	302	3	53	53	244	244	0	0
1996	8-Mo. Average	281	12	0	0	231	230	0	0

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present (Continued) (Thousand Barrels per Day)

	Year/Month	Q	atar		audi abia ^b	A	nited rab irates	A	otal Arab PEC
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude O
982	Average	7	7	552	530	92	81	854	736
983	Average	(s)	0	337	321	30	18	632	533
984	Average	Š	4	325	309	117	90	819	634
85	Average	(s)	0	168	132	45	35	472	300
86	Average	13	12	685	618	44	38	1,162	854
87	Average	0	0	751	642	61	56	1,274	965
88	Average	Ō	0	1.073	911	29	23	1,839	1.415
89	Average	2	2	1,224	1,116	28	21	2,130	1,794
90	Average	4	4	1,339	1,195	17	9	2,244	1,864
91	Average	0	0	1,802	1,703	3	2	2,064	1,754
992		1	0	1,720	1,597	6	0	1,974	1,660
93	Average	1	0	1,720	1,282	14	12	2,000	1,661
193 194	Average	0	0	1,414		13	11		,
95	Average	0	0	1,402	1,297 1,260	10	5	1,970 1,806	1,636
190	Average	U	U	1,344	1,200	10	5	1,000	1,505
96	January	0	0	1,398	1,334	0	0	1,859	1,517
	February	0	0	1,128	1,053	0	0	1,544	1,285
	March	0	0	1,422	1,318	0	0	1,790	1,484
	April	0	0	1,288	1,200	0	0	1,700	1,403
	May	0	0	1,518	1,414	0	0	2,087	1,643
	June	0	0	1,138	1,035	11	11	1,850	1,433
	July	0	0	1,548	1.371	4	4	2,123	1.642
	August	0	0	1,477	1,333	0	0	2,070	1,599
	September	0	0	1,355	1,255	0	0	1,777	1,491
	October	0	0	1,357	1,209	17	17	1.844	1.486
	November	Ö	Ö	1,297	1,201	0	0	1,738	1,432
	December	Ö	0	1,400	1,236	0	0	1,889	1,511
	Average	0	ŏ	1,363	1,248	3	3	1,859	1,496
97	January	0	0	1,344	1,253	0	0	1,835	1,462
131	February	0	0	1,361	1,250	0	0	1,852	1,421
		0	0	1,292	1,157	0	0	1,052	,
	March	15	0	1,573	1,408	0	0	2,197	1,506 1,720
	April								,
	May	0	0	1,475	1,333	0	0	1,996	1,564
	June	0	0	1,299	1,174	6	0	2,130	1,650
	July	0	0	1,313	1,188	14	0	2,037	1,607
	August	0	0	1,636	1,516	0	0	2,127	1,750
	September	0	0	1,599	1,511	0	0	2,180	1,839
	October	16	0	1,377	1,282	0	0	2,191	1,812
	November	0	0	1,308	1,257	0	0	2,015	1,704
	December	15	0	1,311	1,192	0	0	1,962	1,649
	Average	4	0	1,407	1,293	2	0	2,040	1,641
98	January	0	0	1,500	1,422	0	0	2,035	1,660
	February	18	18	1,415	1.305	0	0	2.011	1,614
	March	0	0	1,508	1,359	13	13	2,199	1,819
	April	0	0	1,470	1,305	20	20	2,322	1,821
	May	0	0	1,352	1,273	0	0	2,322	1,824
	,	15	0	1,631	1,550	0	0	2,554	2,126
	June	15	0	1,609	1,550	0	0	2,554 2,644	2,126
	July	0	0	,	,	0	0	,	,
	August 8-Mo. Average	6	2	1,500 1,499	1,468 1,408	4	4	2,750 2,345	2,463 1,959
	-			•	•	_		-	
97	8-Mo. Average	2	0	1,412	1,285	3	0	2.016	1,586

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present (Continued)

(Thousand Barrels per Day)

	-			lı .	mports from Othe	er-OPEC Sour	ces		
	Year/Month	Ecu	lador ^c	Ga	bon ^d	Indo	onesia	ı	ran
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1982	Average	42	32	40	40	248	226	35	35
1983	Average	61	56	59	59	338	315	48	48
1984	Average	55	47	58	57	343	304	10	10
1985	Average	67	56	52	51	314	292	27	27
1986	Average	77	64	26	25	318	297	19	19
1987	Average	29	23	35	35	285	262	98	98
1988	Average	47	33	16	15	205	186	^g (s)	^g (s)
1989	Average	89	80	50	49	183	158	0	0
1990	Average	49	38	64	64	114	98	0	0
1991	Average	63	53	84	84	111	102	32	32
1992	Average	65	62	124	123	78	70	0	0
1993	Average	81 (c)	78 (c)	152	151	81	65	0	0
1994	Average	(c)	(c)	194 (d)	194 (d)	111	92	0	0
1995	Average	(0)	(5)	(4)	(4)	88	64	0	0
1996	January	(c)	(c)	(d)	(d)	52	43	0	0
	February	(c)	(c)	(d)	(d)	44	43	0	0
	March	(c)	(c)	(d)	(d)	58	55	0	0
	April	(c)	(c)	(d)	(d)	57	57	0	0
	May	(c)	(c)	(d)	(d)	49	15	0	0
	June	(c)	(c)	(d)	(d)	72	65	0	0
	July	(c)	(c)	(d)	(d)	56	48	0	0
	August	(c)	(c)	(d)	(d)	53	49	0	0
	September	(c)	(c)	(d)	(d)	26	26	0	0
	October	(c)	(c)	(d)	(d)	125	82	0	0
	November	(c)	(c)	(d)	(d)	36	12	0	0
	December	(c)	(c)	(d)	(d)	81	32	0	0
	Average	(c)	(c)	(d)	(d)	59	44	0	0
1997	January	(c)	(c)	(d) (d)	(d) (d)	55	38	0	0
	February	(c)	(c)	(d) (d)	(d)	51	39	0	0
	March	(c)	(c)	(d)	(d)	18	15	0	0
	April	(c)	(c)	(d) (d)	(d)	40	32	0	0
	May	(c)	(c)	(d)	(d)	86	86	0	0
	June	(c)	(c)	(d)	(d)	57	50	0	0
	July	(c)	(c)	(d)	(d)	73	66	0	0
	August	(c)	(c)	(d)	(d)	24 90	21 83	0	0
	September October	(c)	(c)	(d)	(d)	90 42	83 42	0	0
	November	(c)	(c)	(d)	(d)	42 79	42 74	0	0
	December	(c)	(c)	(d)	(d)	79 84	74 68	0	0
	Average	(c)	(c)	(d)	(d)	58	51	0	0
1998	January	(c)	(c)	(d)	(d)	36	33	0	0
1330	February	(c)	(c)	(d)	(d)	24	24	0	0
	March	(c)	(c)	(d)	(d)	50	47	0	0
	April	(c)	(c)	(d)	(d)	44	26	0	0
	May	(c)	(c)	(d)	(d)	21	21	0	0
	June	(c)	(c)	(d)	(d)	0	0	0	0
	July	(c)	(c)	(d)	(d)	96	84	0	0
	August	(c)	(c)	(d)	(d)	59	41	Ő	Ő
	8-Mo. Average	(c)	(c)	(d)	(d)	42	35	Õ	Ö
1997	8-Mo. Average	(c)	(c) (c)	(d)	(d)	51	43	0	0
		(c)		(d)	(d)				

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present (Continued) (Thousand Barrels per Day)

			Im	ports from Ot	her-OPEC Source	s			
	Year/Month	Ni	geria	Ven	ezuela	0	otal ther EC ^{c,d}	To OPE	otal EC ^{c,d,e}
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1982	Average	514	510	412	155	1.291	998	2.146	1,734
1983	Average	302	301	422	164	1,231	944	1,862	1,477
1984	Average	216	207	548	253	1,230	878	2,049	1,512
1985	Average	293	280	605	306	1,358	1.012	1,830	1,312
1986	Average	440	437	793	416	1,674	1,259	2,837	2,113
987	Average	535	529	804	488	1,787	1,435	3,060	2,400
988	Average	618	607	794	439	1,681	1,281	3,520	2,696
989	Average	815	800	873	495	2,010	1,582	4,140	3,376
990	Average	800	784	1,025	666	2,052	1,650	4,296	3,514
991	Average	703	683	1,035	668	2,028	1,622	4,092	3,377
992	Average	681	665	1,170	826	2,117	1,746	4,092	3,406
993	Average	740	722	1,300	1,010	2,354	2,026	4,354	3,687
994	Average	637	624	1,334	1,034	2,277	1,944	4,247	3,580
1995	Average	627	621	1,480	1,151	2,196	1,835	4,002	3,341
996	January	690	663	1,518	1,148	2,261	1,854	4,120	3,371
	February	647	639	1,495	1,166	2,185	1,849	3,730	3,133
	March	594	548	1,719	1,341	2,371	1,943	4,161	3,427
	April	518	497	1,732	1,288	2,307	1,842	4,007	3,245
	May	705	705	1,700	1,333	2,454	2,054	4,541	3,697
	June	711	697	1,642	1,236	2,425	1,999	4,275	3,432
	July	750	696	1,690	1,332	2,496	2,076	4,619	3,718
	August	793	785	1,749	1,431	2,595	2,265	4,665	3,865
	September	694	677	1,708	1,269	2,428	1,972	4,204	3,463
	October	521	488	1,781	1,448	2,427	2,019	4,271	3,504
	November	465	453	1,728	1,303	2,229	1,767	3,967	3,199
	December	320	298	1,641	1,324	2,042	1,654	3,931	3,166
	Average	617	595	1,676	1,303	2,353	1,942	4,211	3,438
997	January	548	522	1,641	1,215	2,243	1,775	4,078	3,237
	February	625	620	1,601	1,262	2,278	1,920	4,130	3,341
	March	542	541	1,769	1,348	2,329	1,904	4,279	3,410
	April	756	747	1,695	1,319	2,491	2,098	4,688	3,818
	May	992	975	1,927	1,449	3,005	2,510	5,001	4,073
	June	919	919	1,893	1,508	2,869	2,478	4,999	4,128
	July	580	571	1,738	1,418	2,391	2,055	4,429	3,662
	August	882	866	1,794	1,394	2,700	2,280	4,827	4,030
	September	769	769	1,822	1,478	2,680	2,329	4,860	4,168
	October	688	675	1,991	1,605	2,722	2,323	4,913	4,134
	November	649	649	1,689	1,418	2,416	2,141	4,431	3,845
	December	423	423	1,699	1,304	2,205	1,795	4,168	3,444
	Average	698	689	1,773	1,394	2,529	2,134	4,569	3,775
998	January	613	608	1,600	1,333	2,250	1,974	4,285	3,634
	February	544	544	1,699	1,328	2,267	1,896	4,278	3,510
	March	812	812	1,657	1,316	2,519	2,175	4,718	3,994
	April	772	772	1,626	1,334	2,443	2,132	4,765	3,953
	May	899	892	1,902	1,549	2,822	2,463	5,040	4,287
	June	771	755	1,565	1,326	2,336	2,081	4,890	4,207
	July	873	871	1,728	1,415	2,697	2,371	5,341	4,684
	August	736	726	1,683	1,349	2,478	2,116	5,227	4,579
	8-Mo. Average	755	750	1,683	1,370	2,480	2,154	4,825	4,114
997	8-Mo. Average	731	720	1,759	1,365	2,540	2,129	4,557	3,715
996	8-Mo. Average	677	654	1,657	1,286	2,389	1,987	4,270	3,490

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present (Continued) (Thousand Barrels per Day)

						Impo	rts from Non	-OPEC S	Sources ^a				
	Year/Month	Aı	ngola	Au	stralia		hama ands	В	razil	Ca	ınada	Pe	hina, ople's ublic of
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oi
1982	Average	44	42	5	(s)	65	0	47	19	482	214	40	8
1983	Average	78	71	4	Ò	125	0	41	2	547	274	34	6
1984	Average	90	85	38	25	88	0	60	(s)	630	341	46	15
1985	Average	110	104	37	21	40	0	61	0	770	468	59	36
1986	Average	112	102	41	30	37	0	50	0	807	570	90	68
1987	Average	192	180	58	49 59	37	0 0	84 98	0 0	848	608	82 88	63 82
1988 1989	Average	212 284	203 279	64 36	39 31	32 34	0	96 82	0	999 931	681 630	80	76
1990	Average Average	237	236	53	47	37	0	49	Ö	934	643	80	77
1991	Average	254	254	26	21	35	ő	22	ő	1,033	743	91	87
1992	Average	336	336	19	17	36	Ö	20	Ö	1,069	797	90	84
1993	Average	336	336	19	18	28	0	33	0	1,181	900	51	50
1994	Average	331	322	17	16	29	0	31	1	1,272	983	65	64
1995	Average	367	360	16	16	2	0	8	0	1,332	1,040	53	53
1996	January	312	312	21	21	0	0	1	0	1,490	1,117	86	86
	February	195	195	0	0	0	0	4	0	1,413	1,026	42	42
	March	257	257	0	0	12	0	1	0	1,322	1,001	53	53
	April	244	233	22	22	0	0	(s)	0	1,427	1,030	18	18
	May	403 356	379 356	22 56	22 47	0 1	0 0	9 10	0	1,373	1,056	19 37	19 37
	June July	292	292	11	0	0	0	28	0	1,395 1,393	1,091 1,093	78	78
	August	480	456	43	43	0	0	38	0	1,393	1,093	73	73
	September	391	391	47	27	0	0	13	0	1,276	1,000	64	64
	October	502	485	79	65	0	Ö	1	Ö	1,407	1,059	36	36
	November	353	353	35	25	0	Ö	1	Ö	1,516	1,151	104	104
	December	420	405	39	21	0	0	3	0	1,675	1,232	78	78
	Average	351	344	31	25	1	0	9	0	1,424	1,075	57	57
1997	January	485	485	21	21	0	0	1	0	1,571	1,162	84	84
	February	422	422	0	0	13	0	0	0	1,605	1,155	65	65
	March	467	461	37	37	0	0	4	0	1,508	1,158	120	120
	April	435	422	22	22	0	0	0	0	1,454	1,063	46	46
	May June	374 480	369 480	61 23	44 23	0 0	0 0	0 20	0 0	1,571 1,546	1,203 1,184	21 44	21 44
	July	416	416	77	48	0	0	21	0	1,547	1,104	0	0
	August	323	323	91	60	0	0	4	0	1,630	1,201	42	42
	September	428	428	67	27	Ő	ő	3	Ö	1,577	1,250	49	43
	October	537	537	92	53	Ō	Ö	6	Ö	1,503	1,175	48	47
	November	480	480	23	23	0	0	2	0	1,559	1,213	22	22
	December	286	286	59	14	0	0	0	0	1,689	1,333	45	45
	Average	427	425	48	31	1	0	5	0	1,563	1,198	49	48
1998	January	427	427	5	0	0	0	6	0	1,679	1,313	36	36
	February	417	417	48	48	0	0	0	0	1,717	1,382	41	41
	March	302	302	46	30	0	0	27	0	1,460	1,132	63	63
	April	452	452 405	62	14	0	0	11	0	1,546	1,239	36	36
	May	503 399	495 399	82 77	60 33	3 0	0 0	28 45	0	1,608 1,683	1,316 1,404	70 81	70 81
	June July	399 551	399 551	69	33 48	0	0	45 29	0	1,683	1,404	73	73
	August	422	422	42	21	0	0	28	0	1,555	1,336	57	57
	8-Mo. Average	434	433	54	32	(s)	Ŏ	22	Ŏ	1,608	1,295	57	57
1997	8-Mo. Average	425	422	42	32	1	0	6	0	1,554	1,176	53	53
1996	8-Mo. Average	319	311	22	20	2	Ö	12	Ö	1,401	1,057	51	51

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present (Continued) (Thousand Barrels per Day)

						Impor	rts from Nor	n-OPEC S	ources ^a			1	
	Year/Month	Col	ombia	Ecu	ıador ^c	Ga	ıbon ^d	ŀ	taly	Ма	ılaysia	M	exico
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1982	Average	5	0	(c)	(c)	(d)	(d)	18	(s)	20	18	685	645
1983	Average	10	ŏ	(c)	(c)	(d)	(d)	18	(s)	4	3	826	766
984	Average	8	ŏ	(c)	(c)	(d)	(d)	45	(s)	1	ŏ	748	659
985	Average	23	Ö	(c)	(c)	(d)	(d)	60	(s)	3	1	816	715
986	Average	87	57	(c)	(c)	(d)	(d)	76	0	12	11	699	621
987	Average	148	115	(c)	(c)	(d)	(d)	54	1	13	12	655	602
988	Average	134	106	(c)	(c)	(d)	(d)	65	5	19	19	747	674
989	Average	172	136	(c)	(c)	(d)	(d)	34	3	39	39	767	716
990	Average	182	140	(c)	(c)	(d)	(d)	58	2	41	40	755	689
991	Average	163	123	(c)	(c)	(d)	(d)	47	3	24	24	807	759
992	Average	126	102	(c)	(c)	(d)	(d)	55	0	10	10	830	787
993	Average	171	141	(c)	(c)	(d)	(d)	31	0	11	10	919	863
994	Average	161	146	91	91	(d)	(d)	22	0	10	6	984	939
95	Average	219	207	97	96	229	229	5	0	8	6	1,068	1,027
996	January	186	183	126	120	171	171	2	0	0	0	1,281	1,245
	February	149	139	81	81	191	191	0	0	24	17	1,083	1,062
	March	262	250	131	125	154	154	13	0	4		1,176	1,165
	April	280	280	158	143	212	212	(s)	0	0		1,303	1,273
	May	263	249	100	95	154	154	0	0	47		1,288	1,222
	June	250	247	138	133	218	218	16	0	19		1,351	1,274
	July	204	198	113	96	191	191	19	0	0		1,216	1,186
	August	221	217	83	71	156	156	8	0	5		1,157	1,142
	September	213	213	48	48	104	104	15	0	0		1,355	1,306
	October	265	252	66	60	226	226	4	0	31		1,213	1,189
	November	267	267	111	111	253	253	13	0	7		1,157	1,110
	Average	246 234	218 226	89 104	72 96	184 184	184 184	8 8	0 0	0 11	0 6	1,346 1,244	1,301 1,207
07	lenuem.	227	226	110	407	60	60	0	0	20	0	4 224	1 200
97	January	227	226	112	107	62	62	8	0	32 7		1,324	1,280
	February	248	248 257	110	110 148	262 217	262 217	27 5	0 0	33	7 0	1,277	1,241
	March	260		148								1,310	1,249
	April	255 272	255 266	73 109	73 104	203 210	203 210	26 9	0 0	33 9	0	1,448 1,429	1,416 1,408
	May	272	200 228	132	132	210	210	0	0	32		1,429	1,408
	June July	235	225	122	122	335	335	0	0	32 28		1,366	1,362
	August	250	250	128	128	203	203	2	0	23	15	1,452	1,347
	September	289	289	143	143	203	203	0	0	23 37		1,432	1,395
	October	321	321	143	143	235	235	8	0	19		1,410	1,500
	November	322	321	91	91	256	256	0	0	8		1,460	1,453
	December	350	350	66	66	288	288	5	0	7		1,215	1,433
	Average	271	270	115	114	230	230	7	ŏ	23		1,385	1,360
98	January	281	281	77	77	264	264	26	0	17	11	1.467	1.438
	February	243	235	103	103	244	244	6	Ö	64	49	1,214	1,197
	March	261	261	75	75	312	312	12	Ö	10	10	1,235	1,220
	April	348	348	88	81	256	256	2	Ö	29	13	1,473	1,444
	May	394	385	114	105	194	194	35	0	63		1,377	1,359
	June	340	333	75	67	110	110	18	Ö	14		1,400	1,379
	July	229	229	89	89	197	197	8	Ō	46		1,398	1,372
	August	360	357	158	158	118	118	10	Ō	11		1,153	1,139
	8-Mo. Average	307	304	97	94	212	212	15	0	31		1,340	1,319
997	8-Mo. Average	247	244	117	116	214	214	10	0	25	6	1,377	1,347
996	8-Mo. Average	227	221	116	108	181	181	7	0	12	8	1,232	1,197

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present (Continued) (Thousand Barrels per Day)

						Impo	rts from Non	-OPEC S	ourcesa				
	Year/Month	Neth	erlands		erlands tilles	No	orway		ierto lico	Ru	ıssia ^f	s	pain
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1982	Average	35	(s)	175	0	102	102	50	0	1	0	3	(s)
1983	Average	65	3	189	0	66	65	40	0	1	(s)	2	(s)
1984	Average	65	3	188	0	114	112	42	0	13	(s)	11	0
1985	Average	58	0	40	0	32	31	28	0	8	(s)	29	1
1986 1987	Average	54 60	0 0	25 29	0 0	60 80	53 70	21 21	0 0	18 11	(s) 0	53 55	0 0
1988	Average Average	61	0	36	0	67	62	22	0	29	0	68	0
1989	Average	49	0	42	0	138	127	32	0	48	0	67	0
1990	Average	55	ŏ	31	ŏ	102	96	32	Ö	45	ĭ	47	0
1991	Average	29	Ö	81	Ö	82	74	27	Ö	29	1	33	Ö
1992	Average	26	Ö	65	Ö	127	119	26	Ö	18	5	32	Ö
1993	Average	10	0	82	0	142	137	29	0	55	36	37	0
1994	Average	32	0	98	0	202	190	22	0	30	27	37	0
1995	Average	15	0	52	0	273	258	15	0	25	14	16	1
1996	January	16	0	59	0	199	178	6	0	11	0	23	0
	February	38	0	101	0	236	221	17	0	14	0	23	0
	March	35	0	35	0	284	264	24	0	18	0	58	0
	April	20	0	50	0	375	357	17	0	0	0	36	0
	May	9	0	47	0	380	364	22	0	63	63	21	0
	June	26 7	0 0	52 45	0 0	434 375	408 359	25 25	0	14 42	14 33	12 47	0 10
	July August	14	0	53	0	369	362	33	0	32	32	21	0
	September	13	0	56	0	274	254	22	0	39	37	21	0
	October	24	0	97	0	389	359	14	0	42	33	34	0
	November	18	0	79	0	249	220	20	Ö	0	0	33	0
	December	14	Ö	98	Ö	187	166	18	Ö	26	Ö	13	Ö
	Average	19	0	64	0	313	293	20	0	25	18	29	1
1997	January	40	0	94	0	244	230	18	0	21	0	31	0
	February	33	0	60	0	204	179	16	0	19	0	36	0
	March	40	0	102	0	295	276	7	0	13	0	6	0
	April	20	0	114	0	307	294	12	0	20	0	9	0
	May	13	0	116	0	388	366	21	0	0	0	23	0
	June	37	0	66	0	329	318	13	0	8	0	45	0
	July	5 15	0 0	61	0	386 321	360 320	24 20	0	9 32	0 19	6 41	0
	August September	54	0	65 71	0	285	320 265	20 14	0	32 0	0	21	0
	October	13	0	46	0	346	312	19	0	13	6	12	0
	November	28	0	33	0	316	276	23	Ö	21	7	19	0
	December	1	0	54	0	275	249	10	0	0	0	5	Ô
	Average	25	Ö	74	ŏ	309	288	16	Ŏ	13	3	21	Ö
1998	January	6	0	87	0	217	208	18	0	0	0	15	0
	February	18	0	85	0	169	169	21	0	12	0	13	0
	March	5	0	90	32	210	198	5	0	3	0	0	0
	April	36	0	63	0	232	232	4	0	(s)	0	9	0
	May	27	0	55	0	196	172	18	0	0	0	14	0
	June	16	0	86	0	283	252	13	0	34	34	26	0
	July	59	0	24	0	318	311	21	0	69	69	34	0
	August	11	0	41	0	287	260	23	0	(s)	0	8	0
	8-Mo. Average	22	0	66	4	240	226	15	0	15	13	15	0
1997 1996	8-Mo. Average 8-Mo. Average	25 20	0 0	85 55	0 0	310 332	294 315	16 21	0 0	15 24	2 18	25 30	0 1

Table S3. Crude Oil and Petroleum Product Imports, 1982 - Present (Continued) (Thousand Barrels per Day)

					Imports	from No	on-OPEC Sou	ırces ^a					
	Year/Month	а	adad ind bago		nited gdom		irgin ands	N	ther lon- PEC	N	otal lon- 'EC ^{c,d}		otal ports
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oi
1982	Average	112	92	456	441	316	0	306	174	2,968	1,754	5,113	3,488
1983	Average		83	382	365	282	0	378	215	3,189	1,853	5,051	3,329
984	Average		87	402	378	294	0	411	210	3,388	1,914	5,437	3,426
985	Average		98	310	278	247	0	394	137	3,237	1,888	5,067	3,201
986 987	Average		93 75	350 352	317 304	244 272	0 0	426 459	144 196	3,387 3,617	2,065 2,274	6,224 6,678	4,178 4,674
988	Average Average		73 71	315	254	242	0	487	196	3,882	2,274	7,402	5,107
989	Average		73	215	160	321	ő	457	197	3,921	2,467	8,061	5,843
990	Average		76	189	155	282	Ö	417	180	3.721	2,381	8.018	5.894
991	Average		72	138	106	243	Ō	282	137	3,535	2,405	7,627	5,782
992	Average		70	230	200	249	0	335	149	3,796	2,676	7,888	6,083
993	Average	74	55	350	312	254	0	452	240	4,266	3,100	8,620	6,787
994	Average		62	458	396	328	0	450	239	4,749	3,483	8,996	7,063
995	Average	70	62	383	341	278	0	302	181	4,833	3,889	8,835	7,230
996	January		71	364	238	390	0	406	188	5,244	3,932	9,364	7,303
	February		56 53	374	280	343	0	275	169	4,660	3,479	8,390	6,612
	March		52 55	346 481	252 347	311 359	0	373 333	215 157	4,932 5.421	3,788 4.125	9,092 9,429	7,215 7,371
	April May		55 71	421	347 316	298	0	429	282	5,465	4,125	10,007	8,029
	June		54	312	234	292	0	561	402	5,663	4,526	9,938	7,958
	July		58	244	195	344	0	456	292	5,201	4,082	9,820	7,800
	August		59	274	177	279	0	508	348	5,321	4,177	9,986	8,041
	September		37	165	90	268	Ō	502	318	4,938	3,891	9,142	7,353
	October		55	264	136	325	0	477	240	5,566	4,196	9,837	7,701
	November		75	199	160	253	0	513	318	5,277	4,145	9,244	7,344
	December		54	253	167	294	0	438	245	5,487	4,142	9,417	7,307
	Average	76	58	308	216	313	0	440	265	5,267	4,070	9,478	7,508
997	January		55	400	333	335	0	502	210	5,685	4,255	9,763	7,492
	February		61	236	172	341	0	380	170	5,431	4,093	9,561	7,434
	March		55 62	236	161	254	0	437	206	5,554	4,344	9,833	7,754
	April		62	159	70 181	321	0	401	242 341	5,426	4,169	10,114	7,987
	May June		66 55	261 372	311	300 300	0	558 380	225	5,817 5,737	4,579 4,631	10,818 10,736	8,653 8,759
	July		54	198	165	310	0	370	243	5,579	4,515	10,730	8,178
	August		37	268	220	319	0	368	251	5,638	4,591	10,465	8,621
	September		58	166	110	248	Ő	476	364	5,677	4,672	10,537	8,840
	October		55	154	119	301	Ō	479	271	5,879	4,793	10,792	8,927
	November		57	127	87	260	0	403	236	5,517	4,521	9,948	8,366
	December	53	53	135	98	314	0	304	235	5,160	4,208	9,328	7,653
	Average	61	56	226	169	300	0	422	250	5,593	4,450	10,162	8,225
998	January		54	232	166	283	0	408	276	5,609	4,551	9,893	8,185
	February		60	170	89	296	0	358	224	5,299	4,260	9,577	7,770
	March		53	95	70	334	0	376	236	4,976	3,995	9,694	7,989
	April		48	224	154	272	0	444	254	5,633	4,570	10,398	8,523
	May		53	233	133	292	0	494	273	5,863	4,670	10,903	8,957
	June July		56 56	227 96	125 36	310 360	0	511 436	245 219	5,812 5,809	4,518 4,625	10,702 11,151	8,725 9,309
	August		56 53	371	36 295	279	0	436 607	435	5,809	4,625 4,564	10,829	9,309
	8-Mo. Average		54	206	134	304	0	455	271	5,602 5,578	4,564 4,471	10,829 10,402	8,585
997	8-Mo. Average	62	56	267	202	310	0	425	237	5,611	4,401	10,167	8,116
996	8-Mo. Average		59	352	254	327	0	418	257	5,241	4,058	9,511	7,548

^a Includes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC) primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: See Summary Statistics Table and Figure Sources.

^b Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia.

^c On December 31, 1992, Ecuador withdrew as a member of OPEC. As of January 1, 1994, imports of petroleum from Ecuador appear under imports

from Non-OPEC Sources.

d On December 31, 1994, Gabon withdrew as a member of OPEC. As of January 1, 1995, imports of petroleum from Gabon appear under imports from Non-OPEC Sources.

⁶ Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

Imports from other States in the former U.S.S.R. may be included in imports from Russia for the years 1981 through 1992.

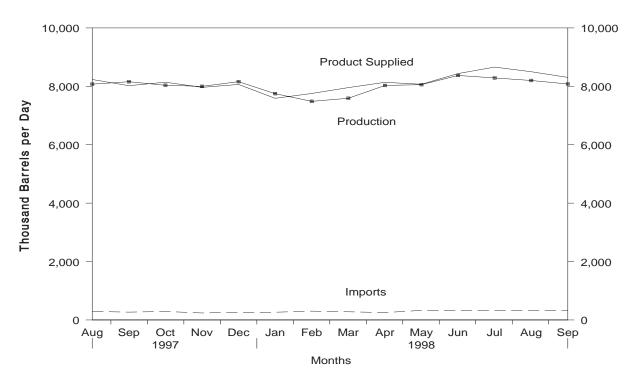
A small amount of Iranian crude oil entered the United States in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the

Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

⁽s) = Less than 500 barrels per day.

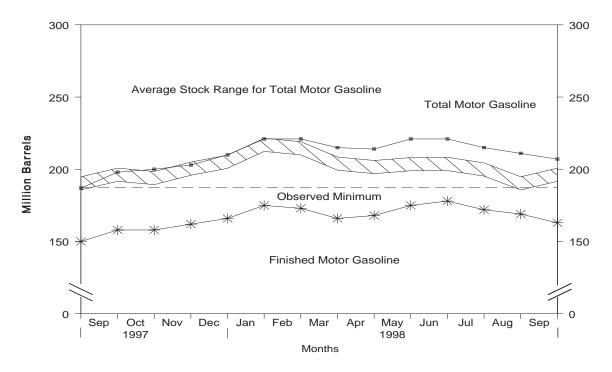
^{– =} Not Applicable.

Figure S5. Finished Motor Gasoline Supply and Disposition, August 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S4. See Summary Statistics Table and Figure Sources.

Figure S6. Motor Gasoline Ending Stocks, August 1997 - Present



Note: • Total motor gasoline includes motor gasoline blending components and finished motor gasoline. • The Observed Minimum for total motor gasoline stocks in the last 36-month period was 187.2 million barrels, occurring in August 1997.

Source: Energy Information Administration, Petroleum Supply Monthly, Table S4. See Summary Statistics Table and Figure Sources.

Table S4. Finished Motor Gasoline Supply and Disposition, 1982 - Present

		Sup	ply		Disposition			g Stocks ^a n Barrels)	Ending Stocks (Million Barrels
	Year/Month						Motor	Gasoline	
		Total Production ^b	Imports ^c	Stock Change ^{c,d}	Exports	Product Supplied ^b	Total ^e	Finished	Oxygenates
1982	Average	6,338	197	, -2 5	20	6,539	^f 235	^f 194	_
1983	Average		247	^f -45	10	6,622	222	186	_
1984	Average		299	54	6	6,693	243	205	_
1985	Average		381	-41	10	6,831	223	190	_
1986	Average		326	11	33	7,034	233	194	_
1987	Average		384	-15	35	7,206	226	189	_
1988	Average		405	3	22	7,336	228	190	_
1989	Average		369	-35 40	39 55	7,328	213	177	_
1990	Average		342	10	55	7,235	220	181	_
1991 1992	Average		297 294	3 -11	82 96	7,188	219 216	182 178	_
1993	Average	*	294 247	26	105	7,268 7,476	226	187	13
1994	Average	·	356	-31	97	7,601	215	176	17
1995	Average Average		265	-40	104	7,789	202	161	12
			000	0.40	400	7.074	045	400	40
1996	January		303	240	163	7,271	215	169	12
	February		293	-10	72	7,599	214	168	12
	March		303	-327	128	7,792	203	158	13
	April		501	49	77	7,873	203	160	13
	May		414 393	66 68	81 95	8,071	205 205	162 164	12 11
	June					8,088			
	July	,	359 346	-5 -284	123 82	8,165 8,343	202 191	164 155	11 12
	August September		339	215	68	7,662	200	161	11
			253	-396	113	8,093	189	149	11
	October November		234	-396 55	128	7,915	188	151	12
	December	,	298	202	117	7,794	195	157	13
	Average		336	-12	104	7,794 7,891	_	_	-
997	January	7,307	320	250	75	7,301	208	165	13
331	February		324	-114	111	7,668	204	162	13
	March		370	-247	123	7,796	200	154	14
	April		300	-70	117	8,064	197	152	13
	May	,	362	203	101	8,139	202	158	13
	June		387	189	96	8,288	204	164	12
	July		291	-414	164	8,496	190	151	13
	August		292	-41	175	8,233	187	150	13
	September		269	275	130	8,023	198	158	13
	October		291	1	186	8,141	200	158	12
	November		239	122	151	7,965	203	162	12
	December	,	265	154	206	8,065	210	166	12
	Average	·	309	26	137	8,017	_	_	_
998	January	7,749	265	296	128	7,590	221	175	13
	February	*	303	-90	124	7,755	221	173	14
	March	,	280	-205	121	7,956	215	166	13
	April	8,029	253	64	81	8,137	214	168	13
	May	,	328	212	103	8,070	221	175	13
	June		317	92	159	8,437	221	178	14
	July	8 287	321	-168	117	8 659	215	172	13
	August	R 8 200	R 321	R -119	R 141	R 8.500	R 211	R 169	13
	September*	□ 8.080	≟ 321	E -23	[∟] 119	[∟] 8.306	E 207	E 163	NA
	9-Mo. Average	E 7,987	E 301	E 7	E 121	E 8,159	_	_	_
997	9-Mo. Average	7,804	324	3	122	8,003	_	_	_

Stocks are totals as of end of period.

b Beginning in 1993, motor gasoline production and product supplied includes blending of fuel ethanol and an adjustment to correct for the imbalance of motor gasoline blending components.

Beginning in 1981, excludes blending components.

d A negative number indicates a decrease in stocks and a positive number indicates an increase.

e Includes motor gasoline blending components but excludes stocks of oxygenates.

In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

R = Revised data. E = Estimated. NA = Not Available.

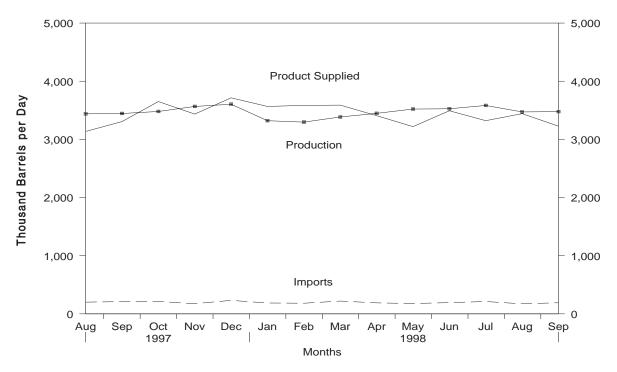
^{— =} Not Applicable.

^{*} See Summary Statistics Explanatory Note 1.

Notes: • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

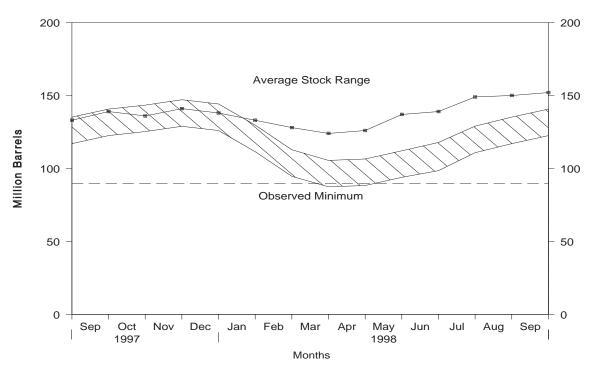
Source: See Summary Statistics Table and Figure Sources.

Figure S7. Distillate Fuel Oil Supply and Disposition, August 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S5. See Summary Statistics Table and Figure Sources.

Figure S8. Distillate Fuel Oil Ending Stocks, August 1997 - Present



Note: The Observed Minimum for distillate fuel oil stocks in the last 36-month period was 89.7 million barrels, occurring in March 1996. Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S5. See Summary Statistics Table and Figure Sources.

Table S5. Distillate Fuel Oil Supply and Disposition, 1982 - Present

		Sup	ply ^a		Disposition			Ending Stocks ^t)
	Versith and							(Million Barrels	
	Year/Month	Total Production	Imports	Stock Change ^c	Exports	Product Supplied ^a	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur
1982	Average	2.606	93	-35	74	2,671	^d 179	_	_
1983	Average	,	174	d -124	64	2,690	140	_	_
1984	Average		272	57	51	2,845	161	_	_
1985	Average		200	-48	67	2,868	144	_	_
1986	Average		247	31	100	2,914	155	_	_
1987	Average		255	-56	66	2,976	134	_	_
1988	Average		302	-30	69	3,122	124	_	_
1989	Average		306	-49	97	3,157	106	_	_
1990	Average		278	73	109	3,021	132	_	_
1991	Average		205	31	215	2,921	144	_	_
1992	Average		216	-8	219	2,979	141	_	_
1993	Average		184	ĭ	274	3,041	141	64	77
1994	Average		203	12	234	3,162	145	73	73
1995	Average		193	-41	183	3,207	130	67	63
	,	0,100				0,201		•	
1996	January		267	-528	216	3,684	114	58	55
	February		279	-570	256	3,727	97	53	44
	March	,	256	-247	139	3,471	90	49	40
	April		258	13	166	3,379	90	52	38
	May		231	182	176	3,128	96	57	39
	June	,	185	198	81	3,189	102	60	41
	July		194	166	134	3,021	107	62	45
	August		195	112	182	3,180	110	62	49
	September		193	157	256	3,172	115	64	51
	October		246	-8	300	3,581	115	60	54
	November		205	234	171	3,442	122	65	57
	December		253	160	206	3,422	127	68	58
	Average	3,316	230	-10	190	3,365	_	_	_
1997	January	3,119	293	-508	133	3,786	111	60	51
	February		246	-197	107	3,427	105	56	49
	March		245	-137	120	3,505	101	58	43
	April	3,280	256	-134	166	3,504	97	59	39
	May	3,527	220	359	153	3,235	108	63	45
	June	3,523	219	326	174	3,243	118	65	53
	July	3,365	223	161	151	3,275	123	64	59
	August		202	320	185	3,136	133	69	64
	September	3,445	210	189	160	3,306	139	69	70
	October	3,480	213	-89	133	3,650	136	63	73
	November	3,566	175	156	149	3,435	141	68	73
	December	3,604	232	-70	192	3,714	138	68	70
	Average	3,392	228	32	152	3,435	_	_	_
1998	January	3,321	187	-192	133	3,566	133	68	65
1330	February	,	183	-183	79	3,585	128	65	63
	March		220	-113	129	3,589	124	63	61
	April		189	42	186	3,408	126	63	63
	May	,	178	359	121	3,219	137	69	68
	June	,	193	78	149	3,492	139	70	69
	July	2 592	212	312	161	3 322	149	76	73
	August	R 3,472	R ₁₇₃	R ₅₄	R 150	R 3 442	^R 150	R 73	^R 78
	September*	□ 3.477	[∟] 191	[∟] 264	E 177	□ 3.227	E 152	E 74	E 78
	9-Mo. Average	F - /	E 192	E 71	E 143	E 3,427	_	_	_
4007	O Ma. Averson		225	44	450				
1997 1996	9-Mo. Average		235 229	44 -56	150 178	3,379 3,326	_	_	_
1330	J mo. Average	3,220	LLS	-30	170	3,320	_	_	_

^a Excludes 10,000 barrels per day in 1981 and 1982 previously published as crude used directly.

b Stocks are totals as of end of period.

c A negative number indicates a decrease in stocks and a positive number indicates an increase.
In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new stock basis stock levels. See Summary Statistics Explanatory Note 4. R = Revised data. E = Estimated.

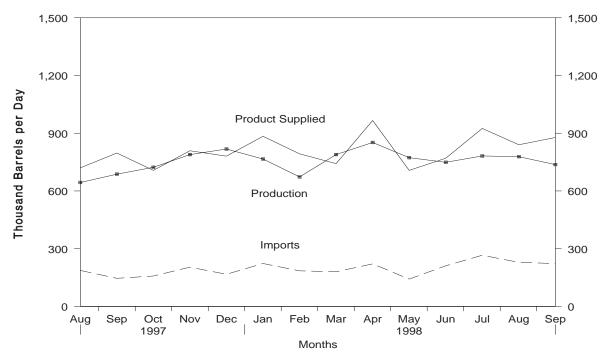
^{— =} Not Applicable.

^{*} See Summary Statistics Explanatory Note 1.

Notes: • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

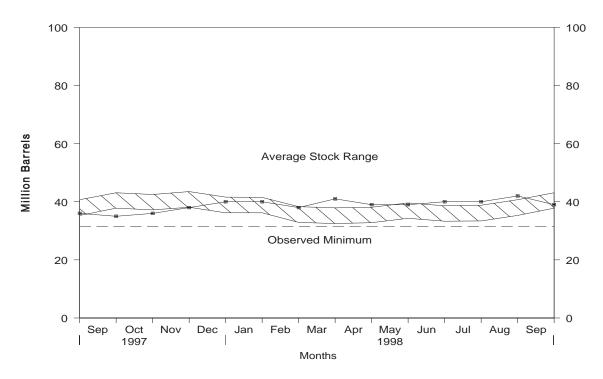
Source: See Summary Statistics Table and Figure Sources.

Figure S9. Residual Fuel Oil Supply and Disposition, August 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S6. See Summary Statistics Table and Figure Sources.

Figure S10. Residual Fuel Oil Ending Stocks, August 1997 - Present



Note: The Observed Minimum for residual fuel oil stocks in the last 36-month period was 31.5 million barrels, occurring in February 1996. Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S6. See Summary Statistics Table and Figure Sources.

Table S6. Residual Fuel Oil Supply and Disposition, 1982 - Present

	_	Supp	ply ^a		Disposition		
	Year/Month	Total Production	Imports	Stock Change ^b	Exports	Product Supplied ^a	Ending Stocks ^c (Million Barrels
1982	Averege	1,070	776	-32	209	4 746	d 66
1982	Average	1,070 852	699	-32 d -55	209 185	1,716 1.421	49
1984	Average	891	681	12	190	1,421	53
1985	Average	882	510	-7	190	1,309	50
1986	Average	889	669	-7 -8	147	1,202	47
	Average					,	47
1987	Average	885	565	(s)	186	1,264	
1988	Average	926	644	-8	200	1,378	45
1989	Average	954	629	-2	215	1,370	44
1990	Average	950	504	13	211	1,229	49
1991	Average	934	453	4	226	1,158	50
1992	Average	892	375	-20	193	1,094	43
1993	Average	835	373	4	123	1,080	44
1994	Average	826	314	-6	125	1,021	42
1995	Average	788	187	-13	136	852	37
1996	January	799	320	-54	108	1,064	36
	February	798	222	-132	114	1,038	32
	March	700	227	-4	95	836	32
	April	671	237	69	96	743	34
	May	732	203	18	89	827	34
	June	731	168	21	144	735	35
	July	646	335	-3	88	896	35
	August	732	227	32	56	871	36
	September	713	197	68	125	717	38
	October	694	260	16	104	835	38
	November	714	270	139	101	744	42
	December	778	307	112	102	872	46
	Average	726	248	24	102	848	
1997	lanuary	801	211	-131	171	972	42
1331	JanuaryFebruary	795	253	-66	137	977	40
		638	239	46	89	742	41
	March			-29			
	April	617	250	-29 -44	105	791	41
	May	618	175	* * ·	102	736	39
	June	727	168	(s)	130	765	39
	July	643	177	-119	159	781	35
	August	644	187	31	80	720	36
	September	687	146	-54	91	797	35
	October	723	158	41	133	707	36
	November	789	204	61	122	809	38
	December	818	167	83	120	781	40
	Average	708	194	-15	120	797	_
1998	January	766	223	-25	131	884	40
	February	673	185	-55	120	793	38
	March	789	180	93	135	742	41
	April	852	221	-60	168	966	39
	May	773	142	-18	227	707	39
	June	749	211	38	152	770	40
	July	_ 782	_ 266	_ (s)	_ 124	_ 925	_ 40
	August	^R 778	R 229	R 62	R ₁₀₅	R 840	R 42
	September*	E 737	E 223	E -37	E 119	[∟] 878	E 39
	9-Mo. Average	E 768	E 209	E - <i>37</i> E 1	E 142	E 834	_
1997	9-Mo. Average	684	200	-41	118	807	_
		724	238	2	101	859	

Excludes 48,000 barrels per day in 1981 and 1982 previously published as crude used directly.

A negative number indicates a decrease in stocks and a positive number indicates an increase.

^c Stocks are totals as of end of period.

d In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

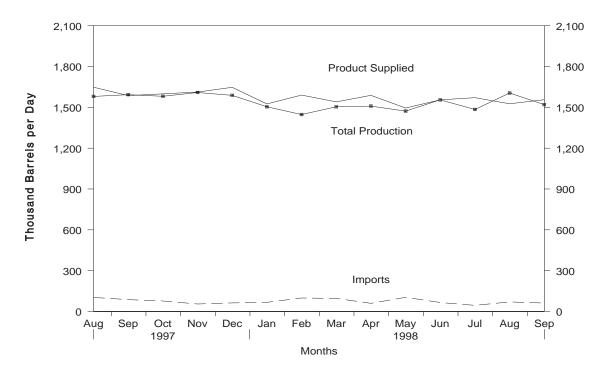
^{– =} Not Applicable.

^{*} See Summary Statistics Explanatory Note 1.

Notes: • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

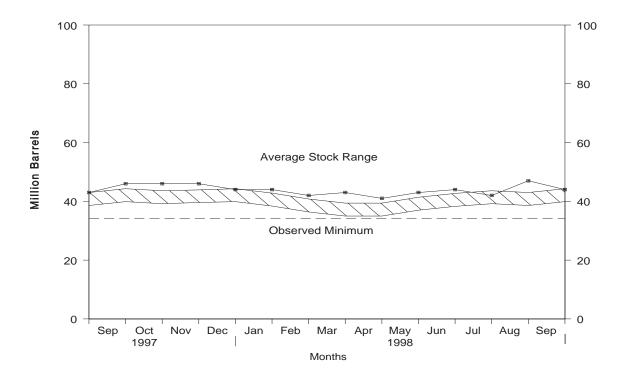
Source: See Summary Statistics Table and Figure Sources.

Figure S11. Jet Fuel Supply and Disposition, August 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S7. See Summary Statistics Table and Figure Sources.

Figure S12. Jet Fuel Ending Stocks, August 1997 - Present



Note: The Observed Minimum for total jet fuel stocks in the last 36-month period was 34.1 million barrels, occurring in March 1996. Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S7. See Summary Statistics Table and Figure Sources.

Table S7. Jet Fuel Supply and Disposition, 1982 - Present

			Supply			Dis	position		Ending Stocks ^a (Million Barrels)		
		Pr	roduction				Produ	uct Supplied	(
	Year/Month	Total	Kerosene-Type	Imports	Stock Change ^b	Exports	Total	Kerosene-Type	Total	Kerosene- Type	
1982	Average	978	778	29	-12	6	1,013	804	^c 37	^C 31	
1983	Average	1,022	817	29	c (s)	6	1,046	839	39	32	
1984	Average	1,132	919	62	9	9	1,175	953	42	35	
1985	Average	1,189	983	39	-4	13	1,218	1,005	40	34	
1986	Average	1,293	1,097	57	25	18	1,307	1,105	50	43	
1987	Average	1,343	1,138	67	(s)	24	1,385	1,181	50	42	
1988	Average	1,370	1,164	90	-17	28	1,449	1,236	44	38	
1989	Average	1,403	1,197	106	-8	27	1,489	1,284	41	34	
1990	Average	1,488	1,311	108	31	43	1,522	1,340	52	46	
1991	Average	1,438	1,274	67	-9	43	1,471	1,296	49	44	
1992	Average	1,399	1,254	82	-16	43	1,454	1,310	43	39	
1993	Average	1,422	1,309	100	-7	59	1,469	1,357	40	38	
1994	Average	1,448	1,410	117	18	20	1,527	1,480	47	46	
1995	Average	1,416	1,407	106	-19	26	1,514	1,497	40	39	
1996	January	1,596	1,593	89	-49	111	1,624	1,607	38	38	
	February	1,499	1,495	100	-129	67	1,661	1,658	35	35	
	March	1,470	1,468	105	-24	59	1,541	1,547	34	34	
	April	1,466	1,464	113	51	11	1,517	1,515	36	35	
	May	1,419	1,418	122	39	13	1,489	1,467	37	37	
	June	1,514	1,512	127	71	11	1,558	1,556	39	39	
	July	1,496	1,493	89	-14	27	1,572	1,569	38	38	
	August	1,510	1,507	104	-2	34	1,582	1,580	38	38	
	September	1,650	1,647	159	152	51	1,606	1,604	43	43	
	October	1,485	1,484	126	-55	35	1,631	1,636	41	41	
	November	1,501	1,500	87	-45	45	1,588	1,588	40	40	
	December	1,575	1,574	110	(s)	115	1,570	1,573	40	40	
	Average	1,515	1,513	111	(s)	48	1,578	1,575	_	_	
1997	January	1,491	1,491	100	-101	78	1,615	1,614	37	37	
	February	1,511	1,510	116	31	23	1,572	1,571	38	38	
	March	1,488	1,487	106	55	11	1,529	1,528	39	39	
	April	1,493	1,492	98	11	21	1,559	1,558	40	40	
	May	1,515	1,514	91	46	9	1,551	1,551	41	41	
	June	1,581	1,580	108	77	38	1,574	1,573	43	43	
	July	1,619	1,618	86	-14	33	1,685	1,685	43	43	
	August	1,580	1,579	103	7	27	1,648	1,648	43	43	
	September	1,593	1,592	87	78	16	1,586	1,585	46	46	
	October	1,581	1,580	77	19	40	1,599	1,599	46	46	
	November	1,609	1,608	55	8	44	1,612	1,612	46	46	
	December	1,588	1,588	63	-75	78	1,647	1,647	44	44	
	Average	1,554	1,554	91	11	35	1,599	1,598	_	_	
1998	January	1,504	1,503	67	9	37	1,525	1,524	44	44	
	February	1,447	1,447	99	-70	25	1,590	1,590	42	42	
	March	1,504	1,503	96	24	36	1,540	1,547	43	43	
	April	1,509	1,508	60	-51	32	1,588	1,588	41	41	
	May	1,472	1,471	104	55	25	1,495	1,497	43	43	
	June	1,555	1,555	66	42	25	1,555	1,555	44	44	
	July	_D 1,484	_B 1,483	_B 45	-71 R _{4.40}	28 _ ^R 8	_B 1,571	_B 1,573	_B 42	_P 42	
	August	1,484 R 1,605 E 1,520	R 1,604	R 70		- ⁸	R 1,526	R 1,527 E 1,556	R 47	R 47	
	September	- 1.520	E 1,519	E 62	E -4	E 29	E 1,556		E 44	E 44	
	9-Mo. Average	E 1,512	E 1,511	E 74	E 9	E 27	E 1,549	E 1,550	_	_	
1997	9-Mo. Average	1,541	1,541	99	21	28	1,591	1,591	_	_	
1996	9-Mo. Average		1,511	112	11	43	1,572	1,567			

Stocks are totals as of end of period.

b A negative number indicates a decrease in stocks and a positive number indicates an increase.

c In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

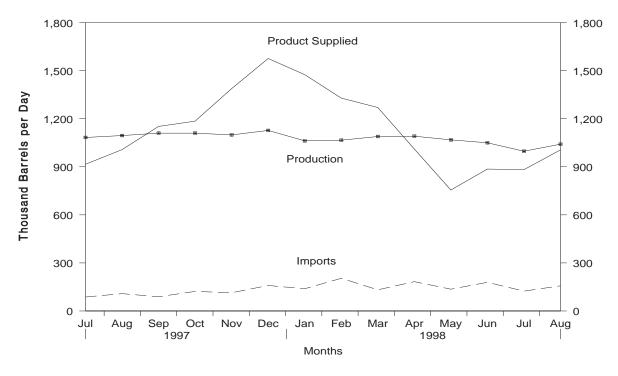
R = Revised data. (s) = Less than 500 barrels per day. E= Estimated.

^{– =} Not Applicable.

^{*} See Summary Statistics Explanatory Note 1.

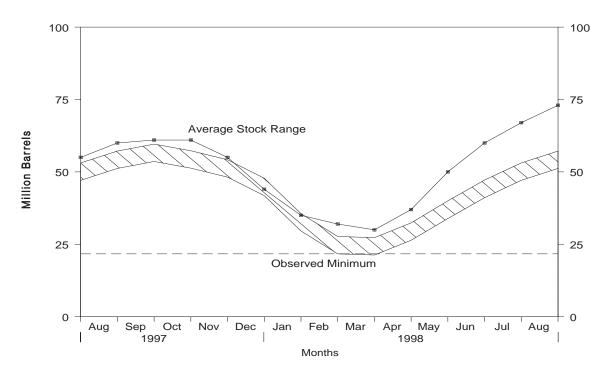
Notes: • Italics denote estimates based upon preliminary data.• Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.
Source: See Summary Statistics Table and Figure Sources.

Figure S13. Propane/Propylene Supply and Disposition, July 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S8. See Summary Statistics Table and Figure Sources.

Figure S14. Propane/Propylene Ending Stocks, July 1997 - Present



Note: The Observed Minimum for propane stocks in the last 36 month period was 21.7 million barrels, occurring in February 1996. Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S8. See Summary Statistics Table and Figure Sources.

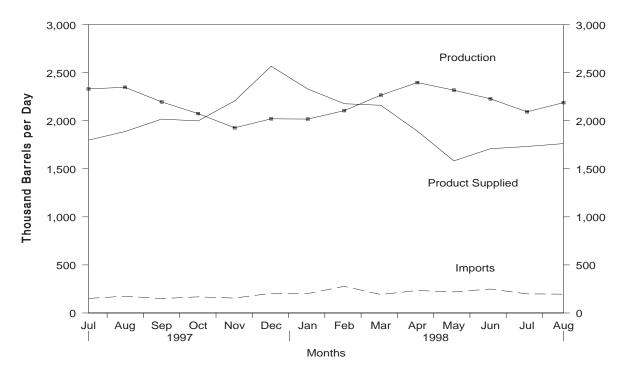
Table S8. Propane/Propylene Supply and Disposition, 1982 - Present

1982 1983 1984 1985 1986 1987 1988	Average	Total Production 711 730 806	Imports 63 44	Stock Change ^a	Refinery Inputs	Exports	Product Supplied	Ending Stocks ^b (Million Barrels)
1983 1984 1985 1986 1987	Average Average Average Average Average	730		-50				(Animon Barrols)
1984 1985 1986 1987	Average Average Average Average Average		44	-33	4	31	798	° 54
1984 1985 1986 1987	Average Average Average			° -24	4	43	751	^c 48
1985 1986 1987	Average		67	⁻ 7	4	30	833	58
1986 1987	Average	816	67	-50	3	48	883	39
1987	. •	817	110	64	4	28	831	63
		828	88	-41	8	24	924	48
	Average	863	106	7	8	31	923	50
1989	Average	862	111	-52	11	24	990	32
1990		878	115	48	(s)	28	917	49
1991	Average	915	91	-3	(s)	28	982	48
1991	Average	956	85	-3 -24	(s)	33	1,032	39
1992	Average	963	103					59 51
1993	Average	963 969	103	34 -13	(s) 0	26 24	1,006	46
1994	Average		102	-13 -10	0	24 38	1,082	46
1995	Average	1,021	102	-10	U	30	1,096	43
1996	January	995	151	-353	0	30	1,468	32
	February	1,001	106	-347	0	39	1,415	22
	March	1,043	116	-1	0	25	1,135	22
	April	1.047	78	114	0	31	981	25
	May	1.048	104	209	0	21	922	32
	June	1,031	122	293	0	21	839	41
	July	1.043	114	188	0	29	940	46
	August	1.051	126	83	0	24	1,069	49
	September	1,057	95	97	Ö	21	1,034	52
	October	1,058	151	-37	0	29	1,218	51
	November	1,063	147	-148	0	34	1,324	46
	December	1.093	122	-106	0	31	1,289	43
	Average	1,093	119	(s)	0	28	1,136	-
	_	•				-		
1997	January	1,039	149	-340	0	28	1,501	32
	February	1,044	126	-276	0	42	1,404	25
	March	1,059	114	92	0	40	1,041	28
	April	1,112	109	150	0	32	1,039	32
	May	1,114	92	252	0	23	930	40
	June	1,110	88	250	0	31	916	47
	July	1,083	87	231	0	24	916	55
	August	1,095	108	172	0	24	1,007	60
	September	1,110	89	30	0	16	1,152	61
	October	1,110	122	17	0	29	1,185	61
	November	1,099	114	-223	0	48	1,388	55
	December	1,127	159	-342	0	53	1,576	44
	Average	1,092	113	3	0	32	1,170	_
1998	January	1,062	139	-303	0	29	1,475	35
	February	1,066	204	-87	0	28	1,329	32
	March	1,089	132	-77	0	28	1,270	30
	April	1,091	183	241	0	22	1,011	37
	May	1,068	136	427	0	22	755	50
	June	1,050	179	329	Ō	13	886	60
	July	997	124	222	Ō	17	882	67
	August	1.041	157	177	0	15	1.006	73
	8-Mo. Average	1,058	156	117	Ö	22	1,075	_
1997	8-Mo. Average	1,082	109	69	0	30	1,091	_
	8-Mo. Average	1,033	115	25	Ö	28	1,095	_

a A negative number indicates a decrease in stocks and a positive number indicates an increase.

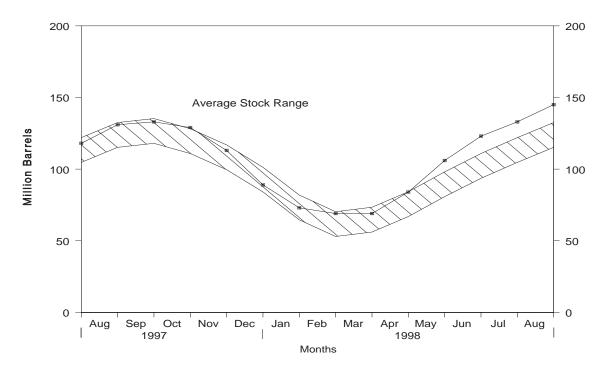
b Stocks are totals as of end of period.
c In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.
(s) = Less than 500 barrels per day.
— = Not Applicable.
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: See Summary Statistics Table and Figure Sources.

Figure S15. Liquefied Petroleum Gases Supply and Disposition, July 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S9. See Summary Statistics Table and Figure Sources.

Figure S16. Liquefied Petroleum Gases Ending Stocks, July 1997 - Present



Source: Energy Information Administration, Petroleum Supply Monthly, Table S9. See Summary Statistics Table and Figure Sources.

Table S9. Liquefied Petroleum Gases Supply and Disposition, 1982 - Present

		Sup	ply		Dispo	sition		
	Year/Month	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Product Supplied	Ending Stocks ^b (Million Barrels
1982	Average	1,528	226	-111	300	65	1,499	° 94
1983	Average	1,642	190	c -4	253	73	1,509	° 101
1984	Average	1.697	195	°-19	291	48	1,572	101
1985	Average	1,704	187	-75	304	62	1,599	74
1986	. •	1,704	242	-73 80	302	42		103
1987	Average	,			302 304	42 38	1,512	
	Average	1,748	190	-15			1,612	97
1988	Average	1,817	209	1	321	49	1,656	97
1989	Average	1,791	181	-47	315	35	1,668	80
1990	Average	1,749	188	48	293	40	1,556	98
1991	Average	1,871	147	-15	304	41	1,689	92
1992	Average	1,972	131	-10	309	49	1,755	89
1993	Average	1,993	160	49	327	43	1,734	106
1994	Average	2,012	183	-19	296	38	1,880	99
1995	Average	2,082	146	-17	289	58	1,899	93
1996	January	1,906	208	-649	419	49	2,295	73
	February	1,912	138	-596	320	60	2,267	56
	March	2,181	165	15	246	38	2,047	56
	April	2,305	122	279	226	56	1,867	65
	May	2,287	156	315	215	67	1,846	74
	June	2,285	184	439	211	36	1,783	87
	July	2,264	182	385	201	72	1,787	99
	•	2,271	166	321	201	50	1,864	109
	August	2,271	150	165	260	47	1,871	114
	September							
	October	2,133	183	-103	309	37	2,073	111
	November	2,041	177	-466	377	41	2,265	97
	Average	2,086 2,156	159 166	-352 -19	355 278	56 51	2,186 2,012	86 —
	_	•	400	= 40			•	
1997	January	2,009	193	-543	344	36	2,365	69
	February	2,072	178	-450	321	78	2,301	57
	March	2,210	163	214	244	62	1,854	63
	April	2,355	169	349	211	41	1,923	74
	May	2,364	161	481	200	40	1,804	89
	June	2,369	160	534	203	43	1,748	105
	July	2,331	151	433	195	56	1,798	118
	August	2,348	175	408	190	37	1,888	131
	September	2.196	150	54	247	29	2.017	133
	October	2,074	168	-100	302	42	1,998	129
	November	1,926	155	-535	345	66	2,206	113
	December	2,020	205	-770	354	74	2,567	89
	Average	2,190	169	9	263	50	2,038	_
1998	January	2,017	202	-522	356	53	2,331	73
	February	2,105	277	-166	320	52	2,177	69
	March	2,266	192	16	241	41	2,161	69
		2,397	234	497	203	39	1,892	84
	April					31		
	May	2,318	219	723	200		1,582	106
	June	2,228	249	538	202	28	1,709	123
	July	2,093	199	331	194	34	1,732	133
	August	2,188	196	398	199	25	1,762	145
	8-Mo. Average	2,202	220	229	239	38	1,916	_
1997	8-Mo. Average	2,259	169	184	238	49	1,957	_
1996	8-Mo. Average	2,177	165	67	255	53	1,968	_

A negative number indicates a decrease in stocks and a positive number indicates an increase.

Stocks are totals as of end of period.

c In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4. — = Not Applicable.

Notes: • Liquefied petroleum gases includes ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. • Beginning in January 1984, unfractionated stream, is reported by individual product. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.
Source: See Summary Statistics Table and Figure Sources.

Table S10.Other Petroleum Products Supply and Disposition, 1982 - Present

		Sup	oply		Dispo	sition			
	Year/Month	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Products Supplied	Ending Stocks ^b (Million Barrels)	
1982	Average	2.475	305	-68	787	205	1,856	^c 216	
1983	Average	2,437	382	c -6	712	236	1,877	c 217	
1984	Average	2,500	503	^c -32	791	236	2,007	198	
1985	Average	2,532	550	22	886	227	1,947	206	
1986	Average	2,704	504	-15	888	291	2,045	201	
1987	•	2,737	543	-13 -1	829	264	2,187	200	
1988	Average	2,737	645	22	799	294	2,303	208	
1989	Average	, -		12	799 797	305	,	213	
	Average	2,771	627				2,285		
1990	Average	2,842	705	-32	887	289	2,402	201	
1991	Average	2,826	675	18	936	277	2,269	208 ° 207	
1992	Average	2,928	707	-3	906	263	2,470	207	
1993	Average	3,035	770	-2 ° 24	1,081	300	2,426	206	
1994	Average	2,973	761	24	861	329	2,518	215	
1995	Average	3,031	708	^c -23	958	348	2,457	206	
1996	January	2,833	873	448	613	335	2,311	220	
	February	2,817	745	-18	872	388	2,320	219	
	March	2,983	820	122	759	315	2,607	223	
	April	3,108	828	174	841	421	2,500	228	
	May	3,128	852	-45	1.010	427	2.588	227	
	June	3,227	923	-203	1,207	399	2,748	221	
	July	3,223	862	-170	1,131	361	2,764	216	
	August	3,332	907	-311	1,289	448	2,812	206	
	September	3,306	751	-56	1,083	410	2,620	204	
	October	3,146	1,068	-84	1,023	323	2,952	202	
		3,093	928	-34	,	366	2,576	202	
	November	,	982	-34 42	1,113 1,224	321	,	201	
	Average	3,088 3,108	879	4∠ -11	1,224 1,014	376	2,485 2,608	202 —	
	_			0=4		400		0.4.0	
1997	January	2,945	1,154	354	831	403	2,511	213	
	February	2,953	1,010	239	944	332	2,448	220	
	March	3,078	955	514	697	391	2,431	236	
	April	3,136	1,054	-122	1,203	395	2,715	232	
	May	3,329	1,156	127	1,089	446	2,823	236	
	June	3,355	936	-468	1,345	417	2,997	222	
	July	3,402	903	-214	1,069	380	3,069	215	
	August	3,426	886	-83	994	460	2,940	213	
	September	3,390	836	101	841	450	2,834	216	
	October	3,227	957	-87	915	381	2,976	213	
	November	3,078	754	-7	919	369	2,551	213	
	December	3,113	744	3	981	396	2,476	213	
	Average	3,204	945	30	985	402	2,733	_	
1998	January	3,030	765	369	695	370	2,361	226	
	February	3,042	760	396	623	360	2,422	237	
	March	3,023	736	245	751	358	2,405	245	
	April	3,138	916	-133	1,195	360	2,634	241	
	May	3,263	974	-84	1,143	377	2,801	238	
	June	3,298	940	-146	1,118	412	2,855	234	
	July	3,451	799	-252	1,142	431	2,930	226	
	August	3,451	697	-252 -18	951	300	3.038	225	
	8-Mo. Average	3,230	823	44	955	371	2,683	_	
1007	9 Ma Avarana	2 200	4.007	4.4	1 020	404	2.745		
1997 1996	8-Mo. Average 8-Mo. Average	3,206 3,083	1,007 852	44 (s)	1,020 966	404 386	2,745 2,583	_	

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

b Stocks are totals as of end of period.

^c In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 4.

^{— =} Not Applicable.

Notes: • Other petroleum products includes pentanes plus, other hydrocarbons and oxygenates, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, liquefied petroleum gases, and crude oil product supplied. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

Summary Statistics Tables and Figures Sources

Information about petroleum supply and disposition at the National level are presented in the Summary Statistics tables. Industry terminology and product definitions are listed alphabetically in the Glossary.

The data presented in these tables are from several sources and represent different levels of timeliness and data finality.

- U.S. Department of Energy, Energy Information Administration (EIA), *Petroleum Supply Annual* (1981 through 1994).
- EIA, *Petroleum Supply Monthly* (January 1994 through August 1998).

- EIA, Weekly Petroleum Supply Reporting System (except domestic crude oil production) (September 1998). A more detailed explanation is provided in Summary Statistics Explanatory Note 1.
- Domestic crude oil production estimate is based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. (January 1994 through September 1998). Refer to Summary Statistics Explanatory Note 2 for a more detailed explanation.

Summary Statistics Explanatory Notes

The following explanatory notes are provided to assist in understanding and interpreting the data presented in the Summary Statistics section of this publication.

Note 1. Preliminary Monthly Statistics Derivation

Data collected from the Weekly Petroleum Supply Reporting System (WPSRS) are used to develop estimates of the most current monthly quantities. The forms that comprise the WPSRS are:

Form Number	<u>Name</u>
EIA-800	"Weekly Refinery Report"
EIA-801	"Weekly Bulk Terminal Report"
EIA-802	"Weekly Product Pipeline Report"
EIA-803	"Weekly Crude Oil Stocks Report"
EIA-804	"Weekly Imports Report"

A sample of all petroleum companies report weekly data to the Energy Information Administration (EIA) on crude oil and petroleum products stocks, refinery inputs and production, and crude oil and petroleum product imports. The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys.

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during a 12-month period. Companies are chosen for the sample beginning with the largest companies with additional companies added until the total sample coverage represents a minimum of 90 percent of each item by geographic region being measured. All monthly-from-weekly estimates are shown in italics.

In calculating monthly estimates based upon weekly submissions, an interpolation process is used to make the weekly figures comparable to the monthly. The interpolation process is designed to resolve the timing differences between the weekly and the monthly systems — the time-of-day of reporting periods and the day-of-month of reporting periods. The end of the weekly reporting period (exactly 1 week long) is 7 a.m. Friday. The end of the monthly reporting period (one calendar month long) is 12 midnight on the last day of the month. To resolve the difference in the time-of-day of the weekly and monthly reporting periods, it is assumed that there is no activity during the period 12 midnight Thursday through

7 a.m. Friday. Thus, for the purposes of interpolation, the weekly system reporting period is assumed to end at 12 midnight on Thursday. The resolution of the day-of-month differences depends on whether the series is a cumulative one (such as production and imports) or a value at a fixed point-in-time (i.e., stocks).

For cumulative items (all items except stocks) the following method is used to calculate a monthly-from-weekly figure for a given month. First, a weight is assigned to each week in the month based on the number of days in that week that are in the month. (All intermediate weeks in a month will have a weight of seven; the beginning and ending weeks in the month may have a weight of less than seven, according to the number of days of the week that are in the month.) The weight for each week is then multiplied by the average daily volume for that week. To arrive at the monthly-from-weekly figure, a sum is taken of these weighted weekly volumes. The daily average for the monthly-from-weekly figure is calculated by dividing the total monthly-from-weekly figure by the number of days in the month.

Stock figures are not cumulative but represent inventories as of the last day of the reporting period. When the reporting week does not coincide with the end of a reporting month, an interpolation is necessary to derive a monthly-from-weekly figure for end-of-month stocks.

To derive the monthly-from-weekly stock figures, the two weekly reports that bracket the end of the month are used. Average daily stock change and the number of interpolated days are determined. The average daily stock change is defined as one-seventh of the difference between the stock level at the end of the last full week of the month and the stock level at the end of the week containing the last day of the month. The number of interpolation days is defined as the number of days between the end of the preceding weekly reporting period (midnight Thursday) and the end of the monthly reporting period. The end-of-month stock levels are then estimated as the sum of (a) the stock level reported the last full week of the month, plus (b) the number of interpolation days multiplied by the average daily stock change for the week.

The monthly-from-weekly exports data are derived from the most recent data published in the *Weekly Petroleum Status Report*. Beginning with statistics for the first week ending in October 1991, weekly estimates of exports are forecast using an autoregressive integrated moving-average (ARIMA) procedure. The ARIMA procedure models a value as a linear combination of its own past values and present and past values of other related time series. The most recent 5 years of

past data are used to obtain the forecast. In addition, for the major products and crude oil, 5 years of related price data are used. The price data include some U.S. and some foreign series.

Note 2. Domestic Crude Oil Production

The Energy Information Administration (EIA) collects monthly crude oil production data on an ongoing basis. Data on crude oil production for States are reported to the EIA by State government agencies. Data on crude oil production for Federal offshore areas are reported to the EIA by the Minerals Management Service of the U.S. Department of the Interior and the Conservation Committee of California Oil Producers.

Currently, all except four crude oil producing States (Michigan, New York, Ohio, and Pennsylvania) report production on a monthly basis. These four States report crude oil production on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service, and the Conservation Committee of California Oil Producers. The final estimate is published in the *Petroleum Supply Annual*. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available.

In order to present more timely crude oil production estimates, the EIA prepares an original, forecast estimate on the first day of the production month (indicated with a "PE"). Approximately 45 days later, this original estimate of monthly crude oil production is replaced by State-level interim estimates (indicated with an "RE"). The State-level interim estimates are based on: (a) data reported by the States (e.g., production data for Alaska are typically reported to the EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report;" (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

Note 3. Figures

Figures associated with the Summary Statistics tables are provided which depict the balance between supply, disposition, and ending stocks for various commodities.

The national inventory (stocks) graphs (Figures S4, S6, S8, S10, S12, S14, and S16) for crude oil, finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel,

propane/propylene, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and observed minimum operating levels. These features are described below.

The graphs displaying inventory levels provide the reader with actual inventory data compared to an *average range* from the most recent 3-year period running from January through December or from July through June. The ranges are updated every 6 months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a 7-year period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the U.S. Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data.

After seasonal factors are derived, data from the most recent 3-year period (January through December or July through June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36 months is calculated adjusting for extreme data points. The upper curve of the average range is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the average range is twice the standard deviation.

The lines labeled "observed minimum" are the lowest inventory level observed during the most recent 36-month period as published in the *Petroleum Supply Monthly*.

Note 4. Frames Maintenance

In January 1981 and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been as listed below.

Crude Oil: 1982- 645 (Total) and 351 (Other Primary).

- Crude Oil and Petroleum Products: 1980- 1,425; and 1982- 1,461.
- Motor Gasoline: 1980- 263 (Total) and 214 (Finished);
 1982- 244 (Total) and 202 (Finished).
- Distillate Fuel Oil: 1980- 205; and 1982- 186.
- Residual Fuel Oil: 1980- 91; and 1982- 69.
- Jet Fuel: 1980- 42 (Total) and 36 (Kerosene-type); and 1982- 39 (Total) and 32 (Kerosene-type).
- Propane/Propylene: 1980- 69; and 1982- 57.
- Liquefied Petroleum Gases: 1980- 128; and 1982-102.
- Other Petroleum Products: 1980- 207; and 1982-219.

Stock change calculations beginning in 1981 and 1983 were made using new basis stock levels.

Stocks of Alaskan crude oil in-transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded coverage (new basis), 1980 end-of-year crude oil stocks would have been 488 million barrels (Total) and 380 million barrels (Other Primary).

Beginning with January 1984, natural gas liquids supply and disposition data were collected on a component basis rather than a product basis. This change affected stocks reported

and stock change calculations. Under the new basis, end-of-year 1983 stocks would have been:

- Propane/Propylene: 1983- 55.
- Liquefied Petroleum Gases: 1983- 108.
- Other Petroleum Products: 1983-210.

In response to changes in the Clean Air Act Amendments of 1990 requiring that all gasoline sold in carbon monoxide nonattainment areas have an oxygen content of 2.7 percent (by weight) during winter months, the Energy Information Administration (EIA) conducted a frame identifier survey in 1991 of companies that produce, blend, store, or import oxygenates. The purpose of this survey was to (1) identify all U.S. producers, blenders, storers, and importers of oxygenates; and (2) collect supply and blending data for 1990 and end of 1990 inventory data on those oxygenates blended into motor gasoline. A summary of the results from the identification survey were published in the *Weekly Petroleum Status Report* dated February 12, 1992 and in the February 1992 issue of the *Petroleum Supply Monthly*.

In order to continue to provide relevant information about U.S. and regional gasoline supply, the EIA conducted a second frame identifier survey of these companies during 1992. As a result, a number of respondents were added to the monthly surveys effective in January 1993: 19 blenders, 25 stock holders, and 8 importers. This change did not affect stocks reported and therefore did not cause a new basis stock level to be calculated.

Table 1. U.S. Petroleum Balance, August 1998

	T. 0.0. Fettoleam Balance, August 1990	Cur	rent Month	Yea	ar to Date
	Commodity	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
	Crude Oil				
(4)	Field Production	E 35,108	E _{1,133}	E 287,963	E 1,185
(1)	Alaska		= 1,133 E 5,143	E 1,266,778	= 1,185 = 5,213
(2) (3)	Total U.S.		E 6,276	E 1,554,741	E 6,398
(3)	Net Imports	194,556	0,270	1,554,741	0,390
(4)	Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	283,435	9,143	2,086,102	8,585
(5)	SPR Imports		0	0	0
(6)	Exports		51	31,756	131
(7)	Imports (Net Including SPR)	281,850	9,092	2,054,346	8,454
	Other Sources				
(8)	SPR Stock Change (Withdrawal (+), Addition (-))		0	3	(s)
(9)	Other Stock Change (Withdrawal (+), Addition (-))		293	-25,438	-105
(10)	Product Supplied and Losses		0	-1 40.265	(s)
(11) (12)	Unaccounted for ^a		(s) 292	49,265 23,829	203 98
(12)	Crude Input to Refineries	- ,	15,660	3,632,917	14,950
(13)	(13) = (3) + (7) + (12)	405,400	13,000	3,032,317	14,330
	Natural Gas Liquids (NGL)				
(14)	Field Production ^b		1,846	473,888	1,950
(15)	Net Imports ^C	1,440	46	3,670	15
(16)	Stock Change (Withdrawal (+), Addition (-)) ^c		-39	-3,572	-15
(17)	Total NGL Supply	57,431	1,853	473,985	1,951
	Other Liquids Unfinished Oils and Gasoline Blending Components, Total				
(18)	Stock Change (Withdrawal (+), Addition (-))	212	-7	-6,280	-26
(19)	Net Imports		348	117,836	485
(20)	Other Liquids New Supply(Field Production)		247	45,641	188
(21)	Refinery Processing Gain ^a		915	207,236	853
(22)	Crude Oil Product Supplied		0	0	0
(23)	Total Other Liquids (23) = (18) through (22)	46,586	1,503	364,433	1,500
(24)	Total Production of Products (24) = (13) + (17) + (23)	589,485	19,016	4,471,335	18,401
	Net Imports of Refined Products				
(25)	Imports (Gross)	38,097	1,229	309,805	1,275
(26)	Exports	,	666	194,252	799
(27)	Imports (Net)	17,451	563	115,553	476
(28)	Total New Supply of Products	606,936	19,579	4,586,888	18,876
(29)	Refined Products Stock Change (Withdrawal (+), Addition (-))	-14,600	-471	-74,657	-307
(30)	Total Petroleum Products Supplied for Domestic Use	592,336	19,108	4,512,231	18,569
` '	(30) = (28) + (29)				
(31)	Finished Motor Gasoline	263,491	8,500	1,978,373	8,141
(32)	Distillate Fuel Oil	'	3,442	838,689	3,451
(33)	Residual Fuel Oil		840	201,313	828
(34)	Jet Fuel		1,526	376,207	1,548
(35)	Liquefjed Petroleum Gases		1,762	465,575	1,916
(36)	Other ^d		3,038	652,075	2,683
(37)	Crude Oil		0	0	0
(38)	Total Products Supplied(38) = (31) through (37)	592,336	19,108	4,512,231	18,569
	Ending Stocks, All Oils				
(39)	Crude Oil (Excluding SPR)		_	330,127	_
(40)	Strategic Petroleum Reserve	563,426	_	563,426	_
(41)	Finished Motor Gasoline		_	168,778	_
(42)	Distillate Fuel Oil		_	150,466	_
(43)	Residual Fuel Oil		_	41,693	_
(44)	Jet Fuel	,	_	46,553	_
(45)	Liquefied Petroleum Gases		_	145,208	_
(46) (47)	Other ^d Total Stocks		_	225,317 1,671,568	_
(77)	(47) = (39) through (46)	1,071,300	_	1,071,300	_
	(+1) = (33) (110ugii (+0)				

^a Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Refinery processing gain represents the volumetric amount by which total output is greater than input for a given period of time. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50 thousand barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

Includes field production of fuel ethanol and an adjustment for motor gasoline blending components.

c Includes products in the pentanes plus category only.

d Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, and liquefied petroleum gases.

E = Estimated.

⁼ Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA), Monthly Petroleum Supply Reporting System. • Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

Table 2. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, August 1998

(Thousand Barrels)

		Su	pply				Disposition	ı		
Commodity	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c	Ending Stocks
Crude Oil	E 194,556	_	283,435	-8	-9,070	0	485,468	1,585	0	893,553
Natural Gas Liquids and LRGs	53,113	24,580	7,548	_	13,557	_	10,278	822	60,584	154,491
Pentanes Plus	9,859	_	1,474	_	1,224	_	4,121	34	5,954	9,283
Liquefied Petroleum Gases	43,254	24,580	6,074	_	12,333	_	6,157	789	54,629	145,208
Ethane/Ethylene		1,180	438	_	956	_	0	0	18,533	21,474
Propane/Propylene		16.869	4.871	_	5.475	_	0	478	31.180	72.555
Normal Butane/Butylene		6.063	360	_	5.498	_	2.200	311	2.786	41.831
Isobutane/Isobutylene		468	405	_	404	_	3,957	0	2,130	9,348
Other Liquids	7,649	_	12,701	_	212	_	25,363	1,923	-7,148	151,934
Other Hydrocarbons/Oxygenates		_	1,182	_	-769	_	10,970	1,105	0	12,551
Unfinished Oils			7,073	_	1.147	_	13.145	0	-7,219	96,902
Motor Gasoline Blend. Comp		_	4,446	_	-196	_	1,349	818	-7,219	42,338
Aviation Gasoline Blend. Comp		_	4,440	_	30	_	-101	0	71	143
·										
Finished Petroleum Products	, -	524,900	32,023	_	2,267	_	_	19,858	538,901	471,590
Finished Motor Gasoline		250,109	9,962	_	-3,685	_	_	4,367	263,491	168,778
Reformulated	_	77,314	5,186	_	-3,220	_	_	229	85,491	42,616
Oxygenated	16,270	1,833	0	_	10	_	_	30	18,063	1,310
Other	-12,168	170,962	4,776	_	-475	_	_	4,108	159,937	124,852
Finished Aviation Gasoline	_	770	3	_	4	_	_	0	769	1,547
Jet Fuel	_	49.742	2,159	_	4,336	_	_	254	47,311	46,553
Naphtha-Type		11	0	_	-2	_	_	29	-16	42
Kerosene-Type		49.731	2.159	_	4,338	_	_	225	47.327	46.511
Kerosene		2.767	2,103	_	209	_	_	6	2,553	6,269
Distillate Fuel Oil		107,622	5,376		1,667		_	4,639	106,692	150,466
0.05 percent sulfur and under		70.966	3,370		-3.098			1.246	76.095	72.839
	_	- ,	2.099	_	- ,	_	_	, -	- ,	,
Greater than 0.05 percent sulfur		36,656	,		4,765			3,393	30,597	77,627
Residual Fuel Oil		24,128	7,094	_	1,931	_	_	3,248	26,043	41,693
Naphtha For Petro. Feed. Use	_	7,662	1,883	_	-366	_	_	0	9,911	1,718
Other Oils For Petro. Feed. Use		7,322	3,955	_	339	_	_	0	10,938	2,638
Special Naphthas		2,499	206	_	172	_	_	748	1,785	2,169
Lubricants		6,087	300	_	318	_	_	726	5,343	12,257
Waxes		815	41	_	82	_	_	114	660	1,036
Petroleum Coke		22,469	0	_	522	_	_	5,568	16,379	10,698
Asphalt and Road Oil	_	19,237	1,038	_	-3,522	_	_	182	23,615	23,940
Still Gas	_	22,003	0	_	0	_	_	0	22,003	0
Miscellaneous Products		1,668	5	_	260	_	_	6	1,407	1,828
Total	259,420	549,480	335,707	-8	6,966	0	521,109	24,187	592,336	1,671,568

a Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product
Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker
and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from
State conservable agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

⁽s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

⁼ Not Applicable.

Table 3. U.S. Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-August 1998

(Thousand Barrels)

(Thousand Barreis)					1					
		Sı	apply				Disposition	1		
Commodity	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c	Ending Stocks
Crude Oil	E 1,554,741	_	2,086,102	49,265	25,435	1	3,632,917	31,756	0	893,553
Natural Gas Liquids and LRGs	432,145	179,574	59,990	_	59,284	_	94,644	12,038	505,743	154,491
Pentanes Plus	76,722	_	6,488	_	3,572	_	36,652	2,818	40,168	9,283
Liquefied Petroleum Gases	355,423	179,574	53,502	_	55,712	_	57,992	9,220	465,575	145,208
Ethane/Ethylene	150,182	7,992	4,077	_	2,567	_	0	0	159,684	21,474
Propane/Propylene	124,893	132,137	37,865	_	28,492	_	0	5,283	261,120	72,555
Normal Butane/Butylene	36,266	34,686	6,970	_	23,459	_	28,223	3,937	22,303	41,831
Isobutane/Isobutylene	44,082	4,759	4,590	_	1,194	_	29,769	0	22,468	9,348
Other Liquids	45,641	_	125,307	_	6,280	_	195,297	7,471	-38,100	151,934
Other Hydrocarbons/Oxygenates	75,519	_	14,449	_	95	_	86,148	3,725	0	12,551
Unfinished Oils	_	_	63,610	_	7,372	_	95,032	0	-38,794	96,902
Motor Gasoline Blend. Comp	-29,879	_	47,248	_	-1,179	_	14,803	3,745	0	42,338
Aviation Gasoline Blend. Comp	· —	_	0	_	-8	_	-686	0	694	143
Finished Petroleum Products	41,743	3,950,520	256,303	_	18,945	_	_	185,032	4,044,588	471,590
Finished Motor Gasoline	41,743	1,896,265	72,584	_	2,663	_	_	29,556	1,978,373	168,778
Reformulated	_	601,400	38,379	_	82	_	_	799	638,898	42,616
Oxygenated	118,640	17,635	0	_	228	_	_	380	135,667	1,310
Other	-76,897	1,277,230	34,205	_	2,353	_	_	28,378	1,203,807	124,852
Finished Aviation Gasoline	_	4,962	36	_	-128	_	_	0	5,126	1,547
Jet Fuel	_	367,051	18,353	_	2,627	_	_	6,570	376,207	46,553
Naphtha-Type	_	138	0	_	16	_	_	408	-286	42
Kerosene-Type	_	366,913	18,353	_	2,611	_	_	6,163	376,492	46,511
Kerosene		17,406	206	_	-1,017	_	_	134	18,495	6,269
Distillate Fuel Oil	_	837,222	46,667	_	11,469		_	33,731	838,689	150,466
0.05 percent sulfur and under	_	537.047	25,026	_	4,223	_	_	9,161	548,689	72,839
Greater than 0.05 percent sulfur	_	300,175	21,641	_	7,246	_	_	24,571	289,999	77,627
Residual Fuel Oil	_	187,451	50,442	_	1,261	_	_	35,319	201,313	41,693
Naphtha For Petro, Feed, Use	_	57.376	15.041	_	-90	_	_	0	72.507	1.718
Other Oils For Petro. Feed. Use	_	54,808	42,032	_	446	_	_	Ō	96,394	2,638
Special Naphthas	_	16,623	1,685	_	-92	_	_	4,275	14,125	2,169
Lubricants	_	44,532	2,281	_	-952	_	_	6,146	41,619	12,257
Waxes	_	5,906	342	_	27	_	_	722	5,499	1,036
Petroleum Coke		170,782	194	_	1.208	_	_	66.306	103,462	10,698
Asphalt and Road Oil	_	116,560	6,352	_	1.603	_	_	2,156	119,153	23,940
Still Gas	_	160,850	0,002	_	0	_	_	0	160,850	0
Miscellaneous Products	_	12,726	88	_	-80	_	_	116	12,778	1,828
Total	2,074,269	4,130,094	2,527,702	49,265	109,944	1	3,922,858	236,297	4,512,231	1,671,568

a Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

c Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.
(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

 ^{– =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

Table 4. U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, August 1998

(Thousand Barrels per Day)

		Su	pply				Disposition	ı	_
Commodity	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ⁰
Crude Oil	E 6,276	_	9,143	(s)	-293	0	15,660	51	0
Natural Gas Liquids and LRGs	1,713	793	243	_	437	_	332	27	1,954
Pentanes Plus	318	_	48	_	39	_	133	1	192
Liquefied Petroleum Gases		793	196	_	398	_	199	25	1.762
Ethane/Ethylene		38	14	_	31		0	0	598
Propane/Propylene		544	157	_	177	_	0	15	1.006
				_		_			,
Normal Butane/Butylene		196	12	_	177	_	71	10	90
Isobutane/Isobutylene	181	15	13	_	13	_	128	0	69
Other Liquids	247	_	410	_	7	_	818	62	-231
Other Hydrocarbons/Oxygenates	327	_	38	_	-25	_	354	36	0
Unfinished Oils	_	_	228	_	37	_	424	0	-233
Motor Gasoline Blend. Comp	-80	_	143	_	-6	_	44	26	0
Aviation Gasoline Blend. Comp	_	_	0	_	1	_	-3	0	2
Finished Petroleum Products	132	16,932	1,033	_	73	_	_	641	17,384
Finished Motor Gasoline		8,068	321	_	-119	_	_	141	8,500
Reformulated		2,494	167	_	-104			7	2.758
Oxygenated		2,494 59	0	_		_	_	1	583
				_	(s)	_	_		
Other		5,515	154	_	-15	_	_	133	5,159
Finished Aviation Gasoline		25	(s)	_	(s)	_	_	0	25
Jet Fuel	_	1,605	70	_	140	_	_	8	1,526
Naphtha-Type	_	(s)	0	_	(s)	_	_	1	-1
Kerosene-Type	_	1,604	70	_	140	_	_	7	1,527
Kerosene	_	89	(s)	_	7	_	_	(s)	82
Distillate Fuel Oil	_	3,472	173	_	54	_	_	1 5 0	3,442
0.05 percent sulfur and under	_	2,289	106	_	-100	_	_	40	2.455
Greater than 0.05 percent sulfur	_	1,182	68	_	154	_	_	109	987
Residual Fuel Oil		778	229	_	62	_	_	105	840
Naphtha For Petro. Feed. Use		247	61	_	-12		_	0	320
Other Oils For Petro. Feed. Use		236	128		11			0	353
				_		_	_	-	58
Special Naphthas		81	7	_	6	_	_	24	
Lubricants		196	10	_	10	_	_	23	172
Waxes		26	1	_	3	_	_	4	21
Petroleum Coke		725	0	_	17	_	_	180	528
Asphalt and Road Oil		621	33	_	-114	_	_	6	762
Still Gas		710	0	_	0	_	_	0	710
Miscellaneous Products	_	54	(s)	_	8	_	_	(s)	45
Total	8,368	17,725	10,829	(s)	225	0	16,810	780	19,108

a Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

^b A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

C Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

⁽s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

^{— =} Not Applicable.

Table 5. U.S. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-August 1998

		Su	pply				Disposition		
Commodity	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ⁶
Crude Oil	E 6,398	_	8,585	203	105	(s)	14,950	131	0
Natural Gas Liquids and LRGs		739	247 27	_	244 15	_	389 151	50 12	2,081 165
Liquefied Petroleum Gases		739	220	_	229	_	239	38	1.916
Ethane/Ethylene	,	33	17	_	11	_	0	0	657
Propane/Propylene		544	156	_	117	_	0	22	1.075
Normal Butane/Butylene		143	29	_	97	_	116	16	92
Isobutane/Isobutylene		20	19	_	5	_	123	0	92
Other Liquids	188	_	516	_	26	_	804	31	-157
Other Hydrocarbons/Oxygenates		_	59	_	(s)	_	355	15	0
Unfinished Oils		_	262	_	30	_	391	0	-160
Motor Gasoline Blend. Comp	-123	_	194	_	-5	_	61	15	0
Aviation Gasoline Blend. Comp		_	0	_	(s)	_	-3	0	3
Finished Petroleum Products	172	16,257	1,055	_	78	_	_	761	16,644
Finished Motor Gasoline	172	7,804	299	_	11	_	_	122	8,141
Reformulated	_	2,475	158	_	(s)	_	_	3	2,629
Oxygenated	488	73	0	_	ìí	_	_	2	558
Other	-316	5,256	141	_	10	_	_	117	4,954
Finished Aviation Gasoline	_	20	(s)	_	-1	_	_	0	21
Jet Fuel	_	1,510	76	_	11	_	_	27	1,548
Naphtha-Type	_	['] 1	0	_	(s)	_	_	2	[′] -1
Kerosene-Type	_	1,510	76	_	11	_	_	25	1,549
Kerosene	_	72	1	_	-4	_	_	1	76
Distillate Fuel Oil	_	3,445	192	_	47	_	_	139	3,451
0.05 percent sulfur and under	_	2,210	103	_	17	_	_	38	2,258
Greater than 0.05 percent sulfur	_	1,235	89	_	30	_	_	101	1,193
Residual Fuel Oil	_	771	208	_	5	_	_	145	828
Naphtha For Petro. Feed. Use	_	236	62	_	(s)	_	_	0	298
Other Oils For Petro. Feed. Use	_	226	173	_	2	_	_	0	397
Special Naphthas		68	7	_	(s)	_	_	18	58
Lubricants		183	9	_	-4	_	_	25	171
Waxes		24	1	_	(s)	_	_	3	23
Petroleum Coke		703	1	_	5	_	_	273	426
Asphalt and Road Oil		480	26	_	7	_	_	9	490
Still Gas		662	0	_	0	_	_	0	662
Miscellaneous Products	_	52	(s)	_	(s)	_	_	(s)	53
Total	8,536	16,996	10,402	203	452	(s)	16,143	972	18,569

^a Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

b A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

^c Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

⁽s) = Less than 500 barrels per day.

E = Estimated.

Table 6. PAD District I—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, August 1998

-			Supply					Disposition	on		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 849	_	46,075	1,923	-201	-2,115	0	50,726	34	0	14,486
Natural Gas Liquids and LRGs		1,956	758	_	2,882	1,180	_	31	54	5,164	8,456
Pentanes Plus	97	_	0	_	0	14	_	0	1	82	32
Liquefied Petroleum Gases		1,956	758	_	2,882	1,166	_	31	53	5,082	8,424
Ethane/Ethylene	250	0	0	_	0	0	_	0	0	250	0
Propane/Propylene	325	1,626	749	_	2,773	542	_	0	25	4,906	5,213
Normal Butane/Butylene		399	9	_	59	572	_	10	27	-22	2,810
Isobutane/Isobutylene		-69	0	_	50	52	_	21	0	-51	401
Other Liquids	874	_	5,183	_	643	-1,687	_	11,112	76	-2.801	19,639
Other Hydrocarbons/Oxygenates		_	47	_	0	-239	_	2.136		0	2.105
Unfinished Oils		_	811	_	2	607	_	3,078	0	-2,872	11,419
Motor Gasoline Blend. Comp		_	4,325	_	641	-2,062	_	5,976	1	2,3.2	6,038
Aviation Gasoline Blend. Comp		_	0	_	0	7	_	-78	Ö	71	77
Finished Petroleum Products	1,328	62,143	25,057	_	86,799	1,487	_	_	775	173,065	162,128
Finished Motor Gasoline	1,328	31,897	9,628	_	50,626	-2,048	_	_	36	95,491	51,780
Reformulated	· —	19,952	4.949	_	9.435	-654	_	_	2	34,988	20,212
Oxygenated		0	, 0	_	0	-20	_	_	(s)	2,786	162
Other	,	11,945	4,679	_	41,191	-1.374	_	_	34	57,717	31,406
Finished Aviation Gasoline		28	0,070	_	109	9	_	_	0	128	228
Jet Fuel		3.475	1.651	_	12.186	850	_	_	3	16.459	11.091
Naphtha-Type		0,475	1,051	_	12,100	0.50			1	-1	0
Kerosene-Type		3,475	1.651	_	12,186	850	_	_	2	16,460	11,091
Kerosene		417	1,031	_	298	-95	_		3	808	3.063
Distillate Fuel Oil		13,584	5,058		19,917	3,159	_	_	66	35,334	70,703
0.05 percent sulfur and under		,	,		,	,	_	_	6	23,709	19,831
	_	5,465	3,111	_	13,599	-1,540	_			,	,
Greater than 0.05 percent sulfur		8,119	1,947	_	6,318	4,699		_	60	11,625	50,872
Residual Fuel Oil Petrochemical Feedstocks ^e		4,213	7,019	_	2,033	-65	_	_	262	13,068	16,505
		516	301	_	110	3	_	_	0	924	504
Special Naphthas		53	102	_	78	-18	_	_	28	223	93
Lubricants		548	263	_	844	-11	_	_	127	1,539	2,317
Waxes		63	24	_	2	10	_	_	24		55
Petroleum Coke		1,617	0	_	0	-90	_	_	209	1,498	601
Asphalt and Road Oil		3,501	1,010	_	596	-219	_	_	14	5,312	5,098
Still Gas		2,161	0	_	0	0	_	_	0	2,161	0
Miscellaneous Products	_	70	0	_	0	2	_	_	4	64	90
Total	3,884	64,099	77,073	1,923	90,123	-1,135	0	61,869	940	175,428	204,709

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

^e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

 ^{– =} Not Applicable.

Table 7. PAD District I—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-August 1998

			Supply					Dispositio	on		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 6,402	_	377,231	8,193	-677	3,512	0	387,277	360	0	14,486
Natural Gas Liquids and LRGs	6,198	12,539	5,933	_	23,879	2,364	_	939	448	44,798	8,456
Pentanes Plus	. 685	_	0	_	0	20	_	0	12	653	32
Liquefied Petroleum Gases	. 5,513	12,539	5,933	_	23,879	2,344	_	939	436	44,145	8,424
Ethane/Ethylene	. 1,881	0	0	_	0	0	_	0	0	1,881	0
Propane/Propylene	2,464	12,743	5,664	_	23,258	908	_	0	237	42,984	5,213
Normal Butane/Butylene		643	269	_	335	1,441	_	387	199	96	2,810
Isobutane/Isobutylene		-847	0	_	286	-5	_	552	0	-816	401
Other Liquids	. 40	_	55,172	_	4,333	-3	_	73,634	110	-14,196	19,639
Other Hydrocarbons/Oxygenates		_	3.793	_	0	-130	_	17,607	105	, 0	2.105
Unfinished Oils		_	6,809	_	91	620	_	21.165	0	-14.885	11.419
Motor Gasoline Blend. Comp		_	44,570	_	4,242	-491	_	35,549	5	0	6,038
Aviation Gasoline Blend. Comp			0	_	0	-2	_	-687	0	689	77
First I Breat and Breat are	45 700	404.00=	407.050			40.400			0.404	4 0 44 0 40	400 400
Finished Petroleum Products	-,	464,337	187,958	_	692,722	10,400	_	_	8,434	1,341,949	162,128
Finished Motor Gasoline	-,	236,725	68,623	_	400,695	1,184	_	_	524	720,101	51,780
Reformulated		154,395	37,037	_	81,202	968	_	_	58	271,608	20,212
Oxygenated		0	0	_	488	-118	_	_	2	20,773	162
Other		82,330	31,586	_	319,005	334	_	_	464	427,720	31,406
Finished Aviation Gasoline	. —	47	1	_	584	0	_	_	0	632	228
Jet Fuel	. —	23,561	16,720	_	101,667	-862	_	_	687	142,123	11,091
Naphtha-Type	. —	0	0	_	0	0	_	_	228	-228	0
Kerosene-Type	. —	23,561	16,720	_	101,667	-862	_	_	459	142,351	11,091
Kerosene	. —	3,727	206	_	1,052	-1,513	_	_	22	6,476	3,063
Distillate Fuel Oil	. —	109,755	44,165	_	169,291	10,666	_	_	1,037	311,508	70,703
0.05 percent sulfur and under	. —	39,342	23,960	_	100,128	1,199	_	_	46	162,185	19,831
Greater than 0.05 percent sulfur	. —	70,413	20,205	_	69,163	9,467	_	_	992	149,322	50,872
Residual Fuel Oil		33,396	47,143	_	9,566	-213	_	_	2.968	87,350	16,505
Petrochemical Feedstocks ^e		3,122	2,072	_	347	26	_	_	0	5.515	504
Special Naphthas		420	781	_	843	-23	_	_	352	1,715	93
Lubricants		4,181	2,046	_	5.578	-420	_	_	1,136	11,089	2,317
Waxes		588	209	_	5	-165	_	_	193	774	55
Petroleum Coke		12.446	0		0	281	_	_	1,371	10.794	601
Asphalt and Road Oil		20,384	5.941		3,094	1.438	_	_	1,371	27,874	5,098
Still Gas		15,462	0,941		3,094	1,430			0	15,462	3,098
Miscellaneous Products		523	51	_	0	1	_	_	35	538	90
				0.400		46.070	•	464 050			
Total	28,406	476,876	626,294	8,193	720,257	16,273	0	461,850	9,352	1,372,551	204,709

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

^{- =} Not Applicable.

Table 8. PAD District I—Daily Average Supply and Disposition of Crude Oil and Petroleum **Products, August 1998**

			Supply					Disposition	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 27	_	1,486	62	-6	-68	0	1,636	1	0
Natural Gas Liquids and LRGs		63	24	_	93	38	_	1	2	167
Pentanes Plus	3	_	0	_	0	(s)	_	0	(s)	3
Liquefied Petroleum Gases		63	24	_	93	38	_	1	2	164
Ethane/Ethylene	8	0	0	_	0	0	_	0	0	8
Propane/Propylene		52	24	_	89	17	_	0	1	158
Normal Butane/Butylene		13	(s)	_	2	18	_	(s)	1	-1
Isobutane/Isobutylene		-2	0	_	2	2	_	1	0	-2
Other Liquids	28	_	167	_	21	-54	_	358	2	-90
Other Hydrocarbons/Oxygenates	62	_	2	_	0	-8	_	69	2	0
Unfinished Oils		_	26	_	(s)	20	_	99	0	-93
Motor Gasoline Blend. Comp		_	140	_	21	-67	_	193	(s)	0
Aviation Gasoline Blend. Comp		_	0	_	0	(s)	_	-3	0	2
Finished Petroleum Products	43	2,005	808	_	2,800	48	_	_	25	5,583
Finished Motor Gasoline	43	1,029	311	_	1,633	-66	_	_	1	3,080
Reformulated		644	160	_	304	-21	_	_	(s)	1,129
Oxygenated	89	0	0	_	0	-1	_	_	(s)	90
Other		385	151	_	1,329	-44	_	_	1	1,862
Finished Aviation Gasoline		1	0	_	4	(s)	_	_	0	4
Jet Fuel		112	53	_	393	27	_	_	(s)	531
Naphtha-Type		0	0	_	0	0	_	_	(s)	(s)
Kerosene-Type		112	53	_	393	27	_	_	(s)	531
Kerosene		13	(s)	_	10	-3			(s)	26
Distillate Fuel Oil		438	163	_	642	102			2	1.140
0.05 percent sulfur and under		176	100	_	439	-50	_	_	(s)	765
Greater than 0.05 percent sulfur		262	63	_	204	-50 152	_	_	(5)	375
		136	226	_	204 66	-2	_	_	8	375 422
Residual Fuel Oil Petrochemical Feedstocks ^e	_			_			_	_		
		17	10	_	4	(s)	_	_	0	30
Special Naphthas		2	3	_	3	-1 (a)	_	_	1 4	7
Lubricants		18	8	_	27	(s)	_	_		50
Waxes		2	1	_	(s)	(s)	_	_	1	2
Petroleum Coke		52	0	_	0	-3	_	_	7	48
Asphalt and Road Oil		113	33	_	19	-7	_	_	(s)	171
Still Gas		70	0	_	0	0	_	_	0	70
Miscellaneous Products	_	2	0	_	0	(s)	_	_	(s)	2
Total	125	2,068	2,486	62	2,907	-37	0	1,996	30	5,659

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

— = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

^{- =} Not Applicable.

Table 9. PAD District I—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum **Products, January-August 1998**

			Supply					Disposition	on	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 26	_	1,552	34	-3	14	0	1,594	1	0
Natural Gas Liquids and LRGs	26	52	24	_	98	10	_	4	2	184
Pentanes Plus	3	_	0	_	0	(s)	_	0	(s)	3
Liquefied Petroleum Gases	23	52	24	_	98	ìó	_	4	ž	182
Ethane/Ethylene		0	0	_	0	0	_	0	0	8
Propane/Propylene		52	23	_	96	4	_	0	1	177
Normal Butane/Butylene		3	1	_	1	6	_	2	1	(s)
Isobutane/Isobutylene		-3	0	_	1	(s)	_	2	0	-3
Other Liquids	(s)	_	227	_	18	(s)	_	303	(s)	-58
Other Hydrocarbons/Oxygenates	57	_	16	_	0	-1	_	72	(s)	0
Unfinished Oils		_	28	_	(s)	3	_	87	0	-61
Motor Gasoline Blend. Comp			183		17	-2		146	(s)	0
Aviation Gasoline Blend. Comp			0	_	0		_	-3	(5)	3
Aviation Gasoline Blend, Comp	_	_	U	_	U	(s)	_	-3	U	3
Finished Petroleum Products		1,911	773	_	2,851	43	_	_	35	5,522
Finished Motor Gasoline		974	282	_	1,649	5	_	_	2	2,963
Reformulated		635	152	_	334	4	_	_	(s)	1,118
Oxygenated		0	0	_	2	(s)	_	_	(s)	85
Other		339	130	_	1,313	1	_	_	2	1,760
Finished Aviation Gasoline	_	(s)	(s)	_	2	0	_	_	0	3
Jet Fuel	_	97	69	_	418	-4	_	_	3	585
Naphtha-Type	_	0	0	_	0	0	_	_	1	-1
Kerosene-Type	_	97	69	_	418	-4	_	_	2	586
Kerosene	_	15	1	_	4	-6	_	_	(s)	27
Distillate Fuel Oil		452	182	_	697	44	_	_	4	1,282
0.05 percent sulfur and under		162	99	_	412	5	_	_	(s)	667
Greater than 0.05 percent sulfur		290	83	_	285	39	_	_	4	614
Residual Fuel Oil		137	194	_	39	-1	_	_	12	359
Petrochemical Feedstocks ^e	_	13	9	_	1	(s)	_		0	23
Special Naphthas		2	3		3	(s)			1	7
Lubricants		17	8	_	23	(S) -2	_	_	5	46
		2	0 1	_		-2 -1	_	_		3
Waxes		∠ 51	0	_	(s) 0	-1 1	_	_	1 6	3 44
Petroleum Coke			•	_	•	•	_	_	-	
Asphalt and Road Oil		84	24	_	13	6	_	_	(s)	115
Still Gas		64	0	_	0	0	_	_	0	64
Miscellaneous Products	_	2	(s)	_	0	(s)	_	_	(s)	2
Total	117	1,962	2,577	34	2,964	67	0	1,901	38	5,648

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day. E = Estimated.

LRG = Liquefied Refinery Gas.

 ^{– =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 10. PAD District II—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, August 1998

			Supply					Dispositio	n		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 16,067	_	25,327	-4,566	66,530	-3,888	0	106,497	749	0	72,709
Natural Gas Liquids and LRGs		4,680	1,868	_	-282	4,486	_	2,239	102	8,345	51,246
Pentanes Plus	1,290	_	30	_	818	233	_	813	29	1,063	2,589
Liquefied Petroleum Gases		4.680	1.838	_	-1.100	4,253	_	1.426	73	7.282	48.657
Ethane/Ethylene	2,909	0	4	_	-1,837	257	_	0	0	819	5,145
Propane/Propylene	3,039	3,459	1.448	_	688	2.773	_	0	25	5,836	31,115
Normal Butane/Butylene		1,055	120	_	-301	735	_	353	49	769	9,674
Isobutane/Isobutylene		166	266	_	350	488	_	1,073	0	-143	2,723
Other Liquids	-2,200	_	1	_	2,593	-90	_	1,867	1	-1,384	27,924
Other Hydrocarbons/Oxygenates	1,279	_	0	_	0	64	_	1,214	1	0	1,887
Unfinished Oils		_	1	_	115	-824	_	2,325	0	-1,385	14,486
Motor Gasoline Blend. Comp	-3,479	_	0	_	2,478	652	_	-1,653	0	0	11,518
Aviation Gasoline Blend. Comp		_	0	_	0	18	_	-19	0	1	33
Finished Petroleum Products		111,029	358	_	29,840	555	_	_	588	144,507	109,113
Finished Motor Gasoline		55,876	64	_	16,871	-129	_	_	117	77,245	43,701
Reformulated	_	9,967	0	_	480	-40	_	_	(s)	10,487	980
Oxygenated	9,437	1,644	0	_	0	6	_	_	0	11,075	320
Other	-5,014	44,265	64	_	16,391	-95	_	_	117	55,684	42,401
Finished Aviation Gasoline	_	171	1	_	128	-9	_	_	0	309	304
Jet Fuel	_	6,843	0	_	4,274	816	_	_	(s)	10,301	8,807
Naphtha-Type	_	0	0	_	0	0	_	_	(s)	(s)	0
Kerosene-Type	_	6,843	0	_	4,274	816	_	_	Ó	10,301	8,807
Kerosene	_	484	0	_	18	239	_	_	(s)	263	1,028
Distillate Fuel Oil	_	27,031	99	_	7,294	1,740	_	_	` 6	32,678	34,805
0.05 percent sulfur and under	_	18.609	75	_	6.198	1.763	_	_	0	23,119	24,416
Greater than 0.05 percent sulfur		8,422	24	_	1,096	-23	_	_	6	9,559	10,389
Residual Fuel Oil		1,897	75	_	8	157	_	_	1	1,822	2,660
Petrochemical Feedstocks ^e	_	1,343	35	_	403	-17	_	_	0	1,798	259
Special Naphthas		814	34	_	118	71	_	_	8	887	344
Lubricants		734	26	_	292	61	_	_	65	926	1,455
Waxes		101	10	_	0	3	_	_	29	79	180
Petroleum Coke		4.069	0	_	0	-240	_	_	244	4,065	3,650
Asphalt and Road Oil		6,970	14	_	434	-2.228	_	_	118	9,528	11,639
Still Gas		4,404	0	_	0	0	_	_	0	4.404	0
Miscellaneous Products		292	0	_	0	91	_	_	(s)	201	281
Total	27,196	115,709	27,554	-4,566	98,681	1,063	0	110,603	1,440	151,468	260,992

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels. E = Estimated.

LRG = Liquefied Refinery Gas.

^{- =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 11. PAD District II—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-August 1998

			Supply					Dispositio	on		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 131,476	_	211,576	-4,256	490,928	-922	0	816,678	13,967	0	72,709
Natural Gas Liquids and LRGs Pentanes Plus	9,528	32,694	20,605 250		305 5,559	21,717 819	_	21,331 7,688	4,826 2,770	75,672 4,060	51,246 2,589
Liquefied Petroleum Gases Ethane/Ethylene	23,212	32,694 0	20,355 86	_	-5,254 -14,641	20,898 2,167	_	13,643 0	2,056 0	71,612 6,490	48,657 5,145
Propane/Propylene Normal Butane/Butylene Isobutane/Isobutylene	8,510	27,285 4,375 1,034	16,853 1,531 1,885		6,919 -396 2,864	13,126 4,873 732		0 6,280 7,363	663 1,393 0	61,686 1,474 1,962	31,115 9,674 2,723
Other Liquids		_	14	_	16,265	3,128	_	8,446	11	-5,940	27,924
Other Hydrocarbons/Oxygenates Unfinished Oils		_	0 8	_	0 -410	-27 2,102	_	9,711 3,442	11 0	0 -5,946	1,887 14,486
Motor Gasoline Blend. Comp Aviation Gasoline Blend. Comp		_	6 0	_	16,675 0	1,056 -3	_	-4,704 -3	(s) 0	0	11,518 33
Finished Petroleum Products		851,344	3,152	_	201,166	5,605	_	_	4,887	1,072,380	109,113
Finished Motor Gasoline Reformulated		436,953 65,989	1,110 0	_	119,756 4.027	1,793 -215	_	_	583 28	582,653 70,203	43,701 980
Oxygenated		13,901	Ö	_	-549	-217	_	_	180	82,200	320
Other		357,063	1,110	_	116,278	2,225	_	_	375	430,249	42,401
Finished Aviation Gasoline		1,248	19	_	542	-69	_	_	0	1,878	304
Jet Fuel Naphtha-Type		51,316 28	0		28,886 0	-131 0	_	_	380 (s)	79,953 28	8,807 0
Kerosene-Type		51,288	0	_	28,886	-131	_	_	379	79,926	8,807
Kerosene		3,512	Ö	_	-22	-551	_	_	13	4,028	1,028
Distillate Fuel Oil	_	208,861	800	_	50,022	3,430	_	_	280	255,973	34,805
0.05 percent sulfur and under		146,303	571	_	42,487	2,096	_	_	157	187,108	24,416
Greater than 0.05 percent sulfur		62,558	229	_	7,535	1,334	_	_	124	68,864	10,389
Residual Fuel Oil		16,662	247	_	-3,761	85	_	_	108	12,955	2,660
Petrochemical Feedstocks ^e		9,734	274 300	_	1,165 1.078	-97 -134	_	_	0 97	11,270 7.515	259 344
Special Naphthas Lubricants		6,100 5,833	300 188	_	1,078	-134 -280	_	_	97 458	7,515 7.356	344 1,455
Waxes		5,833 994	91	_	1,513	-280 36	_	_	456 179	7,356 870	1,455
Petroleum Coke		33,484	0	_	0	436	_	_	1,181	31,867	3,650
Asphalt and Road Oil		42,080	115	_	1,987	1,167	_	_	1,605	41,410	11,639
Still Gas		32,287	0	_	0	0	_	_	0	32,287	0
Miscellaneous Products		2,280	8	_	0	-80	_	_	3	2,365	281
Total	217,994	884,038	235,347	-4,256	708,664	29,528	0	846,455	23,692	1,142,112	260,992

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

^e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

^{– =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 12. PAD District II—Daily Average Supply and Disposition of Crude Oil and Petroleum **Products, August 1998**

			Supply					Disposition	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 518	_	817	-147	2,146	-125	0	3,435	24	0
Natural Gas Liquids and LRGs Pentanes Plus		151 —	60 1	=	-9 26	145 8	_	72 26	3 1	269 34
Liquefied Petroleum Gases Ethane/Ethylene		151 0	59 (s)	_	-35 -59	137 8	_	46 0	2	235 26
Propane/PropyleneNormal Butane/Butylene	98	112 34	47 4	_	22 -10	89 24	_	0 11	1 2	188 25
Isobutane/Isobutylene		5	9	_	11	16	_	35	0	-5
Other LiquidsOther Hydrocarbons/Oxygenates		_	(s) 0	_	84 0	-3 2	_	60 39	(s) (s)	-45 0
Unfinished Oils	-112	_	(s) 0	_	4 80	-27 21	_	75 -53	0	-45 0
Aviation Gasoline Blend. Comp	_	_	0	_	0	1	_	-1	0	(s)
Finished Petroleum Products Finished Motor Gasoline		3,582 1,802	12 2	_	963 544	18 -4	_	_	19 4	4,662 2,492
Reformulated Oxygenated	304	322 53	0	_	15 0	-1 (s)	_	_	(s) 0	338 357
OtherFinished Aviation Gasoline	_	1,428 6	2 (s)	_	529 4	-3 (s)	_	_	4 0	1,796 10
Jet FuelNaphtha-Type	_	221 0	0	_	138	26 0	_	_	(s) (s)	332 (s)
Kerosene-Type	_	221 16	0	_	138 1	26 8	_	_	0 (s)	332
0.05 percent sulfur and under	_	872 600	3 2 1	_	235 200	56 57	_	_	(s) 0	1,054 746
Greater than 0.05 percent sulfur Residual Fuel Oil Petrochemical Feedstocks ^e	_	272 61 43	1 2 1	_	35 (s) 13	-1 5 -1	_	_	(s) (s)	308 59 58
Special Naphthas	_	26 24	1	_	4 9	2	=	_	(s)	29 30
Lubricants Waxes Petroleum Coke	_	3 131	(s) 0	_	0	(s) -8	=	_	2 1 8	3 131
Asphalt and Road OilStill Gas	_	225 142	(s) 0	_	14 0	-6 -72 0	=	_	4 0	307 142
Miscellaneous Products	_	9	0	_	0	3	_	_	(s)	6
Total	877	3,733	889	-147	3,183	34	0	3,568	46	4,886

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

LRG = Liquefied Refinery Gas.

— = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

⁼ Estimated.

^{— =} Not Applicable.

Table 13. PAD District II—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-August 1998

			Supply					Dispositio	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 541	_	871	-18	2,020	-4	0	3,361	57	0
Natural Gas Liquids and LRGs	288	135	85	_	1	89	_	88	20	311
Pentanes Plus	39	_	1	_	23	3	_	32	11	17
Liquefied Petroleum Gases		135	84	_	-22	86	_	56	8	295
Ethane/Ethylene		0	(s)	_	-60	9	_	0	Õ	27
Propane/Propylene		112	69	_	28	54	_	0	3	254
				_			_	•		
Normal Butane/Butylene		18	6	_	-2	20	_	26	6	6
Isobutane/Isobutylene	18	4	8	_	12	3	_	30	0	8
Other Liquids	-44	_	(s)	_	67	13	_	35	(s)	-24
Other Hydrocarbons/Oxygenates	40	_	Ò	_	0	(s)	_	40	(s)	0
Unfinished Oils		_	(s)	_	-2	9	_	14	Ò	-24
Motor Gasoline Blend. Comp		_	(s)	_	69	4	_	-19	(s)	0
Aviation Gasoline Blend. Comp		_	0	_	0	(s)	_	(s)	0	(s)
Finished Petroleum Products	440	2 502	40		828	22			20	4.442
	112	3,503	13	_		23	_	_	20	4,413
Finished Motor Gasoline		1,798	5	_	493	7	_	_	2	2,398
Reformulated		272	0	_	17	-1	_	_	(s)	289
Oxygenated	283	57	0	_	-2	-1	_	_	1	338
Other	-171	1,469	5	_	479	9	_	_	2	1,771
Finished Aviation Gasoline	_	5	(s)	_	2	(s)	_	_	0	8
Jet Fuel	_	211	Ò	_	119	-í	_	_	2	329
Naphtha-Type		(s)	0	_	0	0	_	_	(s)	(s)
Kerosene-Type		211	0		119	-1			2	329
		14	0	_		-2	_	_		17
Kerosene			-	_	(s)		_	_	(s)	
Distillate Fuel Oil		860	3	_	206	14	_	_	1	1,053
0.05 percent sulfur and under		602	2	_	175	9	_	_	1	770
Greater than 0.05 percent sulfur		257	1	_	31	5	_	_	1	283
Residual Fuel Oil		69	1	_	-15	(s)	_	_	(s)	53
Petrochemical Feedstocks ^e	_	40	1	_	5	(s)	_	_	0	46
Special Naphthas		25	1	_	4	-1	_	_	(s)	31
Lubricants		24	1	_	6	-1	_	_	2	30
Waxes		4	(s)	_	0	(s)	_	_	1	4
Petroleum Coke		138	(s) 0	_	0	2		_	5	131
			-	_	8	5		_	5 7	
Asphalt and Road Oil		173	(s)	_	-	-	_	_		170
Still Gas		133	0	_	0	0	_	_	0	133
Miscellaneous Products	_	9	(s)	_	0	(s)	_	_	(s)	10
Total	897	3,638	969	-18	2,916	122	0	3,483	97	4,700

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

LRG = Liquefied Refinery Gas.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

^e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

⁼ Estimated.

^{– =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 14. PAD District III—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, August 1998

			Supply					Disposition	n		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 103,417	_	187,691	381	-62,851	-2,477	0	231,114	2	0	737,359
Natural Gas Liquids and LRGs	36,581	15,149	4,600	_	1,351	7,476	_	5,469	396	44,340	86,734
Pentanes Plus	6,346	· —	1,252	_	-364	950	_	2.150	0	4.134	6,381
Liquefied Petroleum Gases	30,235	15.149	3,348	_	1.715	6,526	_	3,319	396	40,206	80,353
Ethane/Ethylene	13.521	1.179	434	_	3,242	702	_	0,010	0	17,674	16,129
Propane/Propylene	10,300	10.038	2,551	_	-2.155	1.703	_	0	336	18.695	32,805
Normal Butane/Butylene	2,271	3,590	2,331	_	,	,	_	1,052		1,530	25,907
				_	728	4,172			59		
Isobutane/Isobutylene	4,143	342	139	_	-100	-51	_	2,267	0	2,308	5,512
Other Liquids	5,234	_	5,825	_	-3,236	1,780	_	7,107	1,768	-2,832	68,614
Other Hydrocarbons/Oxygenates	3,640	_	0	_	0	-702	_	3,391	951	0	4,315
Unfinished Oils	_	_	5,704	_	-117	1,640	_	6,778	0	-2,831	48,487
Motor Gasoline Blend. Comp	1,594	_	121	_	-3,119	837	_	-3,058	817	0	15,781
Aviation Gasoline Blend. Comp	_	_	0	_	0	5	_	-4	0	-1	31
Finished Petroleum Products	-1.529	243.685	5,803	_	-122.502	365	_	_	12,497	112,595	135.232
Finished Motor Gasoline	-1,529	111,191	237	_	-70,592	-741	_	_	3,706	36,342	47,264
Reformulated		17,556	237	_	-9,915	-1,450	_	_	220	9,108	8,683
Oxygenated	651	55	0	_	-554	-19	_	_	0	171	35
Other	-2.180	93,580	0	_	-60.123	728	_		3,487	27,063	38,546
Finished Aviation Gasoline	-2,100	437	0	_	-252	-60	_	_	0,407	245	386
	_		0			2.139		_	74		
Jet Fuel		25,333	-	_	-18,205	,	_	_		4,915	17,449
Naphtha-Type		1	0	_	0	0	_	_	28	-27	1
Kerosene-Type	_	25,332	0	_	-18,205	2,139	_	_	46	4,942	17,448
Kerosene	_	1,712	0	_	-316	100	_	_	(s)	1,296	1,994
Distillate Fuel Oil	_	48,279	0	_	-28,310	-2,622	_	_	3,483	19,108	31,931
0.05 percent sulfur and under	_	31,178	0	_	-20,761	-2,549	_	_	1,175	11,791	18,815
Greater than 0.05 percent sulfur	_	17,101	0	_	-7,549	-73	_	_	2,308	7,317	13,116
Residual Fuel Oil	_	10,921	0	_	-2,041	518	_	_	2,009	6,353	14,898
Petrochemical Feedstocks ^e	_	12,685	5,478	_	-513	49	_	_	0	17,601	3,277
Special Naphthas	_	1,277	70	_	-196	122	_	_	14	1,015	1,676
Lubricants	_	4,088	11	_	-1,045	202	_	_	431	2,421	6,925
Waxes	_	480	2	_	-2	62	_	_	47	371	559
Petroleum Coke	_	11,318	0	_	0	591	_	_	2,705	8,022	3,742
Asphalt and Road Oil	_	4,875	0	_	-1,030	-139	_	_	27	3,957	3,855
Still Gas		10,018	0	_	0	0	_	_	0	10.018	0,000
Miscellaneous Products	_	1,071	5	_	0	144	_	_	1	931	1,276
Total	143,703	258,834	203,919	381	-187,238	7,144	0	243.690	14,662	154 103	1,027,939

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels. E = Estimated.

LRG = Liquefied Refinery Gas.

^{– =} Not Applicable.

Table 15. PAD District III—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-August 1998

			Supply					Disposition	on		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 819,769	_	1,332,602	28,185	-446,729	27,313	1	1,706,511	3	0	737,359
Natural Gas Liquids and LRGs Pentanes Plus Liquefied Petroleum Gases Ethane/Ethylene		113,304 — 113,304 7,990	30,915 5,294 25,621 3,991	_ _ _	6,826 -2,161 8,987 26,550	33,424 2,703 30,721 413		47,447 17,924 29,523	3,385 0 3,385	364,199 30,309 333,890 153.096	86,734 6,381 80,353 16.129
Propane/Propylene Normal Butane/Butylene Isobutane/Isobutylene	83,539 18,505 32,585	78,506 22,900 3,908	14,296 4,630 2,704	_ _ _	-20,423 3,652 -792	14,006 15,893 409	_ _ _	12,435 17,088	2,724 660 0	139,188 20,699 20,908	32,805 25,907 5,512
Other Liquids Other Hydrocarbons/Oxygenates Unfinished Oils Motor Gasoline Blend. Comp Aviation Gasoline Blend. Comp	8,063	_ _ _ _	52,899 22 51,310 1,567 0	_ _ _ _	-22,313 0 1,025 -23,338 0	5,252 -721 5,200 768 5	_ _ _ _	76,164 26,170 68,074 -18,076 -4	6,887 3,287 0 3,600 0	-20,940 0 -20,939 0 -1	68,614 4,315 48,487 15,781 31
Finished Petroleum Products Finished Motor Gasoline Reformulated Oxygenated Other Finished Aviation Gasoline Jet Fuel Naphtha-Type Kerosene-Type Kerosene Distillate Fuel Oil 0.05 percent sulfur and under Greater than 0.05 percent sulfur Residual Fuel Oil Petrochemical Feedstocks ^e Special Naphthas Lubricants Waxes Petroleum Coke Asphalt and Road Oil Still Gas Miscellaneous Products	4,746 -12,334	1,828,343 837,056 148,747 803 687,506 2,677 186,448 5 186,443 8,676 375,484 237,446 138,038 85,166 96,786 8,846 29,630 3,294 81,936 30,918 73,280 8,146	59,270 1,862 1,342 0 520 0 9 0 0 1,857 54,628 601 47 24 0 221 0 21		-930,988 -540,381 -86,677 -1,512 -452,192 -1,227 -142,159 0 -142,159 -1,018 -225,233 -147,519 -77,714 -5,805 -1,512 -1,921 -6,756 0 -5,081 0 110	5,945 946 265 35 646 -45 4,495 0 4,495 1,026 -403 2,049 -2,452 153 436 66 -72 87 -352 -401 0 9			117,047 23,328 440 1 22,887 0 3,035 160 2,875 53 23,157 6,561 16,596 22,301 0 401 3,711 250 40,529 277 0 4	826,045 266,675 62,707 4,001 199,967 1,495 36,768 -155 36,923 6,579 127,497 81,317 46,180 58,764 149,466 7,059 19,282 2,976 41,759 26,182 73,280 8,264	135,232 47,264 8,683 35 38,546 386 17,449 1 17,448 1,994 31,931 18,815 13,116 14,898 3,277 1,676 6,925 559 3,742 3,855 0 1,276
Total	1,146,368	1,941,647	1,475,686	28,185 -		71,934	1		•	1,169,304	1,027,939

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^C A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

^e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

^{- =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 16. PAD District III—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, August 1998

			Supply					Dispositio	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 3,336	_	6,055	12	-2,027	-80	0	7,455	(s)	0
Natural Gas Liquids and LRGs	1,180	489	148	_	44	241	_	176	13	1,430
Pentanes Plus	205	_	40	_	-12	31	_	69	0	133
Liquefied Petroleum Gases	975	489	108	_	55	211	_	107	13	1,297
Ethane/Ethylene		38	14	_	105	23	_	0	0	570
Propane/Propylene		324	82	_	-70	55	_	0	11	603
Normal Butane/Butylene		116	7	_	23	135		34	2	49
				_			_		0	
Isobutane/Isobutylene	134	11	4	_	-3	-2	_	73	0	74
Other Liquids	169	_	188	_	-104	57	_	229	57	-91
Other Hydrocarbons/Oxygenates		_	0	_	0	-23	_	109	31	0
Unfinished Oils	_	_	184	_	-4	53	_	219	0	-91
Motor Gasoline Blend, Comp		_	4	_	-101	27	_	-99	26	0
Aviation Gasoline Blend. Comp		_	Ö	_	0	(s)	_	(s)	0	(s)
Finished Petroleum Products	-49	7.064	187		2.052	12			403	2 622
		7,861		_	-3,952		_	_		3,632
Finished Motor Gasoline		3,587	8	_	-2,277	-24	_	_	120	1,172
Reformulated		566	8	_	-320	-47	_	_	7	294
Oxygenated		2	0	_	-18	-1	_	_	0	6
Other	-70	3,019	0	_	-1,939	23	_	_	112	873
Finished Aviation Gasoline	_	14	0	_	-8	-2	_	_	0	8
Jet Fuel	_	817	0	_	-587	69	_	_	2	159
Naphtha-Type		(s)	0	_	0	0	_	_	1	-1
Kerosene-Type		817	0	_	-587	69		_	1	159
Kerosene		55	0		-10	3			(s)	42
			0	_			_	_		
Distillate Fuel Oil		1,557			-913	-85	_	_	112	616
0.05 percent sulfur and under		1,006	0	_	-670	-82	_	_	38	380
Greater than 0.05 percent sulfur		552	0	_	-244	-2	_	_	74	236
Residual Fuel Oil		352	0	_	-66	17	_	_	65	205
Petrochemical Feedstocks ^e	_	409	177	_	-17	2	_	_	0	568
Special Naphthas	_	41	2	_	-6	4	_	_	(s)	33
Lubricants	_	132	(s)	_	-34	7	_	_	14	78
Waxes		15	(s)	_	(s)	2	_	_	2	12
Petroleum Coke		365	0	_	0	19	_	_	87	259
Asphalt and Road Oil		157	ő	_	-33	-4	_	_	1	128
Still Gas		323	0		-33	0			0	323
Miscellaneous Products		323 35	(s)	_	0	5	_	_	(s)	323
Total	4,636	8,349	6,578	12	-6,040	230	0	7,861	473	4,971

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

^{— =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 17. PAD District III—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum **Products, January-August 1998**

			Supply					Dispositio	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 3,374	_	5,484	116	-1,838	112	(s)	7,023	(s)	0
Natural Gas Liquids and LRGs		466	127	_	28	138	_	195	14	1,499
Pentanes Plus	197	_	22	_	-9	11	_	74	0	125
Liquefied Petroleum Gases	1,027	466	105	_	37	126	_	121	14	1,374
Ethane/Ethylene	473	33	16	_	109	2	_	0	0	630
Propane/Propylene	344	323	59	_	-84	58	_	0	11	573
Normal Butane/Butylene		94	19	_	15	65	_	51	3	85
Isobutane/Isobutylene		16	11	_	-3	2	_	70	0	86
Other Liquids	151	_	218	_	-92	22	_	313	28	-86
Other Hydrocarbons/Oxygenates	118	_	(s)	_	0	-3	_	108	14	0
Unfinished Oils		_	211	_	4	21	_	280	0	-86
Motor Gasoline Blend. Comp		_	6	_	-96	3	_	-74	15	0
Aviation Gasoline Blend. Comp		_	0	_	0	(s)	_	(s)	0	(s)
Finished Petroleum Products	-31	7,524	244	_	-3,831	24	_	_	482	3,399
Finished Motor Gasoline	-31	3,445	8	_	-2,224	4	_	_	96	1,097
Reformulated	_	612	6	_	-357	1	_	_	2	258
Oxygenated	20	3	0	_	-6	(s)	_	_	(s)	16
Other	-51	2,829	2	_	-1,861	`á	_	_	94	823
Finished Aviation Gasoline		11	0	_	-5	(s)	_	_	0	6
Jet Fuel	_	767	(s)	_	-585	18	_	_	12	151
Naphtha-Type		(s)	0	_	0	0	_	_	1	-1
Kerosene-Type	_	767	(s)	_	-585	18	_	_	12	152
Kerosene		36	0	_	-4	4	_	_	(s)	27
Distillate Fuel Oil		1,545	0	_	-927	-2	_	_	95	525
0.05 percent sulfur and under		977	Ő	_	-607	8	_	_	27	335
Greater than 0.05 percent sulfur		568	0	_	-320	-10		_	68	190
Residual Fuel Oil		350	8	_	-24	1	_	_	92	242
Petrochemical Feedstocks ^e		398	225	_	-6	2	_	_	0	615
Special Naphthas		396	225	_	-6 -8		_	_	2	29
Lubricants		122	(s)	_	-6 -28	(s) (s)	_	_	15	29 79
				_		` '	_	_	15	79 12
Waxes		14	(s) 0	_	(s) 0	(s) -1	_	_	167	172
Petroleum Coke		337	1	_	-	•	_	_	167	
Asphalt and Road Oil		127	-	_	-21	-2	_	_	-	108
Still Gas		302	0	_	0	0	_	_	0	302
Miscellaneous Products	_	34	(s)	_	(s)	(s)	_	_	(s)	34
Total	4.718	7,990	6,073	116	-5,733	296	(s)	7,531	524	4,812

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

^{– =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 18. PAD District IV—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, August 1998

			Supply					Dispositio	on		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 10,250	_	5,325	1,918	-2,016	-218	0	15,695	0	0	11,874
Natural Gas Liquids and LRGs Pentanes Plus Liquefied Petroleum Gases	. 810	263 — 263	318 192 126	<u>-</u> -	-3,951 -454 -3.497	111 1 110	_	479 226 253	4 4 (s)	308 317 -9	1,505 214 1,291
Ethane/Ethylene Propane/Propylene	. 1,189 . 1,382	1 252	0 119	_	-1,405 -1,306	-3 61	_	0	(s)	-212 386	200 513
Normal Butane/ButyleneIsobutane/Isobutylene		72 -62	7 0	_	-486 -300	64 -12	_	111 142	0	1 -184	390 188
Other Liquids Other Hydrocarbons/Oxygenates Unfinished Oils Motor Gasoline Blend. Comp. Aviation Gasoline Blend. Comp.	. 65 . — . 202	_ _ _ _	0 0 0 0	_ _ _ _	0 0 0 0	-37 14 -158 107 0	_ _ _ _	128 51 -18 95 0	0 0 0 0	176 0 176 0	4,328 402 2,419 1,507 0
Finished Petroleum Products	88	16,585	229	_	2,248	-879	_	_	14	19,839	10,243
Finished Motor Gasoline	-88	8,220	18	_	850	100	_	_	0	8,900	4,485
Reformulated	. —	0	0	_	0	0	_	_	0	0	0
Oxygenated	. 1,139	134	0	_	0	44	_	_	0	1,229	160
Other	1,227	8,086	18	_	850	56	_	_	0	7,671	4,325
Finished Aviation Gasoline	—	19	1	_	15	4	_	_	0	31	34
Jet Fuel	. —	741	0	_	937	-265	_	_	0	1,943	826
Naphtha-Type	. —	0	0	_	0	0	_	_	0	0	0
Kerosene-Type	. —	741	0	_	937	-265	_	_	0	1,943	826
Kerosene	. —	31	0	_	0	-16	_	_	0	47	88
Distillate Fuel Oil	. —	4,274	204	_	446	-226	_	_	0	5,150	2,644
0.05 percent sulfur and under	. —	3,580	91	_	446	-231	_	_	0	4,348	2,241
Greater than 0.05 percent sulfur	. —	694	113	_	0	5	_	_	0	802	403
Residual Fuel Oil		342	0	_	0	-78	_	_	0	420	529
Petrochemical Feedstocks ^e	. —	22	0	_	0	0	_	_	0	22	1
Special Naphthas	. —	0	0	_	0	0	_	_	(s)	(s)	0
Lubricants	. —	0	0	_	0	0	_	_	10	-10	0
Waxes	. –	109	0	_	0	2	_	_	2	105	52
Petroleum Coke		508	0	_	0	78	_	_	0	430	246
Asphalt and Road Oil		1,597	6	_	0	-482	_	_	1	2,084	1,311
Still Gas		667	0	_	0	0	_	_	0	667	0
Miscellaneous Products	. –	55	0	_	0	4	_	_	0	51	27
Total	. 14,701	16,848	5,872	1,918	-3,719	-1,023	0	16,302	18	20,323	27,950

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

 ^{- =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 19. PAD District IV—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum **Products, January-August 1998**

			Supply					Dispositio	on		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 82,719	_	45,360	13,841	-27,700	-910	0	114,996	135	0	11,874
Natural Gas Liquids and LRGs Pentanes Plus Liquefied Petroleum Gases Ethane/Ethylene	6,286 28,629	1,828 1,828 2	2,517 944 1,573 0	_ _ _	-31,010 -3,398 -27,612 -11,909	135 -13 148 -13	<u>-</u> - -	3,672 1,150 2,522 0	41 36 5	4,402 2,659 1,743 -1,800	1,505 214 1,291 200
Propane/Propylene Normal Butane/Butylene Isobutane/Isobutylene	4,479	2,128 75 -377	1,032 540 1		-9,754 -3,591 -2,358	24 84 53		0 1,546 976	5 0 0	4,946 -127 -1,276	513 390 188
Other Liquids Other Hydrocarbons/Oxygenates Unfinished Oils Motor Gasoline Blend. Comp. Aviation Gasoline Blend. Comp.	624 — 1,189	_ _ _ _	0 0 0 0	_ _ _ _	0 0 0 0	-61 150 198 -409 0	_ _ _ _	1,919 474 -153 1,598 0	0 0 0 0	-45 0 -45 0	4,328 402 2,419 1,507 0
Finished Petroleum Products Finished Motor Gasoline Reformulated Oxygenated Other Finished Aviation Gasoline Jet Fuel Naphtha-Type Kerosene-Type Kerosene Distillate Fuel Oil 0.05 percent sulfur and under Greater than 0.05 percent sulfur Residual Fuel Oil Petrochemical Feedstocks e Special Naphthas Lubricants Waxes Petroleum Coke Asphalt and Road Oil Still Gas Miscellaneous Products	8,305 -8,663 	122,762 60,616 0 2,918 57,698 115 5,732 0 5,732 468 33,091 26,867 6,224 3,072 130 0 0 543 3,978 9,723 4,846	1,406 142 0 0 142 1 0 0 0 0 1,200 395 805 0 0 0 0 0 0 0 0 0 0 0 0 0		12,092 2,759 0 61 2,698 101 7,158 0 7,158 -12 2,086 2,101 -15 0 0 0	-1,080 -361 0 -104 -257 -7 -13 0 -13 21 -155 -63 -92 -71 0 0 32 142 -681 0 13			92 3 0 2 1 0 (s) 0 (s) 0 (s) 0 (s) 0 0 2 64 13 (s) 8 0	136,890 63,516 0 11,385 52,131 224 12,903 0 12,903 435 36,532 29,426 7,106 3,143 130 -2 -64 498 3,836 10,459 4,846 435	10,243 4,485 0 160 4,325 34 826 0 826 88 2,644 2,241 403 529 1 0 0 0 52 246 1,311 0 27
Total		124,590	49,283	13,841	-46,618	-1,916	0	120,587	267	141,247	27,950

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

^e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

 ^{– =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 20. PAD District IV—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, August 1998

			Supply					Dispositio	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 331	_	172	62	-65	-7	0	506	0	0
Natural Gas Liquids and LRGs		8	10	_	-127	4	_	15	(s)	10
Pentanes Plus	26	_	6	_	-15	(s)	_	7	(s)	10
Liquefied Petroleum Gases	112	8	4	_	-113	4	_	8	(s)	(s)
Ethane/Ethylene	38	(s)	0	_	-45	(s)	_	0	Ò	`- 7
Propane/Propylene		`á	4	_	-42	`ź	_	0	(s)	12
Normal Butane/Butylene		2	(s)	_	-16	2	_	4	0	(s)
Isobutane/Isobutylene		-2	0	_	-10	(s)	_	5	0	-6
Other Liquids	9	_	0	_	0	-1	_	4	0	6
Other Hydrocarbons/Oxygenates		_	0	_	0	(s)	_	2	0	0
Unfinished Oils		_	0	_	0	-5	_	-1	0	6
Motor Gasoline Blend. Comp		_	0	_	0	3	_	3	0	0
Aviation Gasoline Blend. Comp	<u>'</u>		0		0	0		0	0	0
Aviation Gasoline Biend. Comp	_	_	U	_	U	U	_	U	U	U
Finished Petroleum Products	-3	535	7	_	73	-28	_	_	(s)	640
Finished Motor Gasoline		265	1	_	27	3	_	_	0	287
Reformulated		0	0	_	0	0	_	_	0	0
Oxygenated		4	0	_	0	1	_	_	0	40
Other		261	1	_	27	2	_	_	0	247
Finished Aviation Gasoline		1	(s)	_	(s)	(s)	_	_	0	1
Jet Fuel	_	24	0	_	30	-9	_	_	0	63
Naphtha-Type	_	0	0	_	0	0	_	_	0	0
Kerosene-Type	_	24	0	_	30	-9	_	_	0	63
Kerosene	_	1	0	_	0	-1	_	_	0	2
Distillate Fuel Oil	_	138	7	_	14	-7	_	_	0	166
0.05 percent sulfur and under	_	115	3	_	14	-7	_	_	0	140
Greater than 0.05 percent sulfur	_	22	4	_	0	(s)	_	_	0	26
Residual Fuel Oil	_	11	0	_	0	-3	_	_	0	14
Petrochemical Feedstocks ^e		1	Ö	_	Ö	Ö	_	_	Õ	1
Special Naphthas		0	0	_	0	0	_	_	(s)	(s)
Lubricants		0	0	_	0	0	_	_	(s)	(s)
Waxes		4	0	_	0	(s)	_	_	(s)	3
Petroleum Coke		16	0	_	0	3	_	_	(3)	14
Asphalt and Road Oil		52	(s)	_	0	-16	_	_	(s)	67
Still Gas		22	(5)		0	0			(5)	22
Miscellaneous Products		2	0	_	0	-	_	_	0	22
IVIISCEIIdHEUUS FIUUUCIS	_	۷	U	_	U	(s)	_	_	U	۷
Total	474	543	189	62	-120	-33	0	526	1	656

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

— = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817,

Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817,

"Monthly Deport," EIA-817, "Monthly Crude Oil Report," EIA-817, "Monthly Report," EIA-817, "Monthly Report," EIA-817, "Monthly Report," EIA-818, "Monthly Report," EIA-819, "Monthly Report," EIA-"Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

^{– =} Not Applicable.

Table 21. PAD District IV—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-August 1998

			Supply					Dispositio	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 340	_	187	57	-114	-4	0	473	1	0
Natural Gas Liquids and LRGs	144	8	10	_	-128	1	_	15	(s)	18
Pentanes Plus	26	_	4	_	-14	(s)	_	5	(s)	11
Liquefied Petroleum Gases	118	8	6	_	-114	1	_	10	(s)	7
Ethane/Ethylene	42	(s)	0	_	-49	(s)	_	0	0	-7
Propane/Propylene	48	` ģ	4	_	-40	(s)	_	0	(s)	20
Normal Butane/Butylene		(s)	2	_	-15	(s)	_	6	Ó	-1
Isobutane/Isobutylene		-2	(s)	_	-10	(s)	_	4	0	-5
Other Liquids	7	_	0	_	0	(s)	_	8	0	(s)
Other Hydrocarbons/Oxygenates	3	_	0	_	0	ìí	_	2	0	Ò
Unfinished Oils		_	0	_	0	1	_	-1	0	(s)
Motor Gasoline Blend. Comp		_	0	_	0	-2	_	7	0	Ò
Aviation Gasoline Blend. Comp		_	0	_	0	0	_	0	0	0
Finished Petroleum Products	-1	505	6	_	50	-4	_	_	(s)	563
Finished Motor Gasoline	-1	249	1	_	11	-1	_	_	(s)	261
Reformulated	_	0	0	_	0	0	_	_	0	0
Oxygenated	34	12	0	_	(s)	(s)	_	_	(s)	47
Other	-36	237	1	_	11	`-í	_	_	(s)	215
Finished Aviation Gasoline		(s)	(s)	_	(s)	(s)	_	_	Ò	1
Jet Fuel	_	24	0	_	29	(s)	_	_	(s)	53
Naphtha-Type		0	0	_	0	0	_	_	0	0
Kerosene-Type		24	0	_	29	(s)	_	_	(s)	53
Kerosene		2	0	_	(s)	(s)	_	_	0	2
Distillate Fuel Oil		136	5	_	9	-1	_	_	(s)	150
0.05 percent sulfur and under		111	2	_	9	(s)			0	121
Greater than 0.05 percent sulfur		26	3		(s)	(s)			(s)	29
Residual Fuel Oil		13	0	_	(5)		_	_	(5)	13
Petrochemical Feedstocks ^e		13	0	_	0	(s) 0	_	_	0	13
		0	0	_	0	0	_	_	-	-
Special Naphthas		0	0	_	0	0	_	_	(s)	(s)
Lubricants		-	-	_	-	-	_	_	(s)	(s)
Waxes		2	0	_	0	(s)	_	_	(s)	2
Petroleum Coke		16	0	_	0	1	_	_	(s)	16
Asphalt and Road Oil		40	(s)	_	0	-3	_	_	(s)	43
Still Gas		20	0	_	0	0	_	_	0	20
Miscellaneous Products	_	2	0	_	0	(s)	_	_	0	2
Total	490	513	203	57	-192	-8	0	496	1	581

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

^e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

^{— =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 22. PAD District V—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, August 1998

			Supply					Dispositio	on		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 63,973	_	19,017	336	-1,462	-372	0	81,436	800	0	57,125
Natural Gas Liquids and LRGs		2,532	4	_	0	304	_	2,060	267	2,426	6,550
Pentanes Plus	1,316	_	0	_	0	26	_	932	0	358	67
Liquefied Petroleum Gases		2,532	4	_	0	278	_	1.128	267	2.068	6,483
Ethane/Ethylene		0	0	_	0	0	_	, 0	0	2	0
Propane/Propylene		1,494	4	_	0	396	_	Ō	91	1,358	2,909
Normal Butane/Butylene		947	0		0	-45	_	674	176	508	3,050
Isobutane/Isobutylene		91	0	_	0	-73	_	454	0	200	524
•											
Other Liquids		_	1,692	_	0	246	_	5,149	77	-307	31,429
Other Hydrocarbons/Oxygenates	3,214	_	1,135	_	0	94	_	4,178	77	0	3,842
Unfinished Oils	_	_	557	_	0	-118	_	982	0	-307	20,091
Motor Gasoline Blend. Comp	259	_	0	_	0	270	_	-11	0	0	7,494
Aviation Gasoline Blend. Comp		_	0	_	0	0	_	0	0	0	2
Finished Petroleum Products	-31	91,458	576	_	3,615	739	_	_	5,984	88,895	54,874
Finished Motor Gasoline		42,925	15		2,245	-867			507	45,513	21,548
		29,839	0	_	2,243	-1.076			7	30,908	12,741
Reformulated		,	-	_		,			-	,	,
Oxygenated	,	0	0	_	554	-1	_	_	29	2,803	633
Other		13,086	15	_	1,691	210	_	_	471	11,802	8,174
Finished Aviation Gasoline	_	115	1	_	0	60	_	_	0	56	595
Jet Fuel	_	13,350	508	_	808	796	_	_	178	13,692	8,380
Naphtha-Type	_	10	0	_	0	-2	_	_	(s)	12	41
Kerosene-Type	_	13,340	508	_	808	798	_	_	1 7 7	13,681	8,339
Kerosene	_	123	0	_	0	-19	_	_	2	140	96
Distillate Fuel Oil		14,454	15	_	653	-384	_	_	1,085	14,421	10,383
0.05 percent sulfur and under		12,134	0	_	518	-541	_	_	65	13,128	7,536
Greater than 0.05 percent sulfur		2,320	15		135	157			1.020	1,293	2.847
				_					,		, -
Residual Fuel Oil		6,755	0	_	0	1,399	_	_	976	4,380	7,101
Petrochemical Feedstocks ^e		418	24	_	0	-62	_	_	0	504	315
Special Naphthas	_	355	0	_	0	-3	_	_	698	-340	_56
Lubricants		717	0	_	-91	66	_	_	94	466	1,560
Waxes	_	62	5	_	0	5	_	_	12	50	190
Petroleum Coke		4,957	0	_	0	183	_	_	2,410	2,364	2,459
Asphalt and Road Oil	_	2,294	8	_	0	-454	_	_	21	2,735	2,037
Still Gas		4,753	0	_	0	0	_	_	0	4,753	0
Miscellaneous Products		180	0	_	0	19	_	_	1	160	154
Total	69,936	93,990	21,289	336	2,153	917	0	88,645	7,128	91,014	149,978

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

 ^{- =} Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Table 23. PAD District V—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-August 1998

			Supply					Dispositio	n		
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	Ending Stocks
Crude Oil	E 514,375	_	119,333	3,302	-15,822	-3,558	0	607,455	17,291	0	57,125
Natural Gas Liquids and LRGs		19,209	20	_	0	1,644	_	21,255	3,339	16,671	6,550
Pentanes Plus	12,420	_	0	_	0	43	_	9,890	1	2,486	67
Liquefied Petroleum Gases	11,260	19,209	20	_	0	1,601	_	11,365	3,338	14,185	6,483
Ethane/Ethylene	17	0	0	_	0	0	_	0	0	17	0
Propane/Propylene	2,903	11,475	20	_	0	428	_	0	1,655	12,315	2,909
Normal Butane/Butylene		6,693	0	_	0	1,168	_	7,575	1.684	162	3,050
Isobutane/Isobutylene		1,041	0	_	Ö	5	_	3,790	0	1,690	524
Other Liquids	17,644	_	17,222	_	1.715	-2,036	_	35,134	462	3,021	31,429
Other Hydrocarbons/Oxygenates	22,697	_	10,634	_	, 0	823	_	32,186	322	0	3.842
Unfinished Oils		_	5,483	_	-706	-748	_	2,504	0	3,021	20,091
Motor Gasoline Blend. Comp		_	1,105	_	2,421	-2,103	_	436	140	0,021	7,494
Aviation Gasoline Blend. Comp		_	0	_	0	-8	_	8	0	0	2
Finished Petroleum Products	6,713	683,734	4,517	_	25,008	-1,925	_	_	54,573	667,324	54,874
Finished Motor Gasoline	-,	324,915	847	_	17.171	-899	_	_	5,118	345,428	21,548
Reformulated	-, -	232,269	0	_	1.448	-936	_	_	273	234,380	12,741
Oxygenated		13	0	_	1,512	632	_	_	194	17,308	633
Other		92,633	847	_	14,211	-595	_		4,651	93,739	8,174
Finished Aviation Gasoline		92,033 875	15	_	0	-393			4,031	897	595
				_	-	-	_		-		
Jet Fuel		99,994	1,624	_	4,448	-862	_	_	2,468	104,460	8,380
Naphtha-Type		105	0	_	0	16	_	_	19	70	41
Kerosene-Type		99,889	1,624	_	4,448	-878	_	_	2,449	104,390	8,339
Kerosene		1,023	0	_	0	0	_	_	46	977	96
Distillate Fuel Oil		110,031	502	_	3,834	-2,069	_	_	9,257	107,179	10,383
0.05 percent sulfur and under		87,089	100	_	2,803	-1,058	_	_	2,397	88,653	7,536
Greater than 0.05 percent sulfur		22,942	402	_	1,031	-1,011	_	_	6,859	18,527	2,847
Residual Fuel Oil	_	49,155	1,195	_	0	1,307	_	_	9,942	39,101	7,101
Petrochemical Feedstocks ^e	_	2,412	99	_	0	-9	_	_	0	2,520	315
Special Naphthas	_	1,257	3	_	0	-1	_	_	3,422	-2,161	56
Lubricants		4,888	0	_	-335	-180	_	_	777	3,956	1,560
Waxes		487	18	_	0	37	_	_	87	381	190
Petroleum Coke		38,938	194	_	Ō	701	_	_	23,224	15,207	2,459
Asphalt and Road Oil		13,455	12	_	Ö	80	_	_	158	13,229	2,037
Still Gas		34,975	0	_	Ö	0	_	_	0	34,975	2,007
Miscellaneous Products		1,329	8	_	-110	-23	_	_	74	1,176	154
Total	562,412	702,943	141,092	3,302	10,901	-5,875	0	663,844	75,665	687,016	149,978

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels.

⁼ Estimated.

LRG = Liquefied Refinery Gas.

^{– =} Not Applicable.

Table 24. PAD District V — Daily Average Supply and Disposition of Crude Oil and Petroleum **Products, August 1998**

			Supply					Dispositio	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 2,064	_	613	11	-47	-12	0	2,627	26	0
Natural Gas Liquids and LRGs		82	(s)	_	0	10	_	66	9	78
Pentanes Plus		_	0	_	0	1	_	30	0	12
Liquefied Petroleum Gases		82	(s)	_	0	9	_	36	9	67
Ethane/Ethylene		0	0	_	0	0	_	0	0	(s)
Propane/Propylene		48	(s)	_	0	13	_	0	3	44
Normal Butane/Butylene		31	0	_	0	-1	_	22	6	16
Isobutane/Isobutylene	16	3	0	_	0	-2	_	15	0	6
Other Liquids		_	55	_	0	8	_	166	2	-10
Other Hydrocarbons/Oxygenates	104	_	37	_	0	3	_	135	2	0
Unfinished Oils	_	_	18	_	0	-4	_	32	0	-10
Motor Gasoline Blend. Comp	8	_	0	_	0	9	_	(s)	0	0
Aviation Gasoline Blend. Comp	_	_	0	_	0	0	_	0	0	0
Finished Petroleum Products	-1	2,950	19	_	117	24	_	_	193	2,868
Finished Motor Gasoline	-1	1,385	(s)	_	72	-28	_	_	16	1,468
Reformulated	_	963	0	_	0	-35	_	_	(s)	997
Oxygenated	73	0	0	_	18	(s)	_	_	1	90
Other	-74	422	(s)	_	55	7	_	_	15	381
Finished Aviation Gasoline	_	4	(s)	_	0	2	_	_	0	2
Jet Fuel	_	431	16	_	26	26	_	_	6	442
Naphtha-Type	_	(s)	0	_	0	(s)	_	_	(s)	(s)
Kerosene-Type	_	430	16	_	26	26	_	_	`6	441
Kerosene		4	0	_	0	-1	_	_	(s)	5
Distillate Fuel Oil	_	466	(s)	_	21	-12	_	_	35	465
0.05 percent sulfur and under	_	391	Ó	_	17	-17	_	_	2	423
Greater than 0.05 percent sulfur		75	(s)	_	4	5	_	_	33	42
Residual Fuel Oil		218	0	_	0	45	_	_	31	141
Petrochemical Feedstocks ^e		13	1	_	Ö	-2	_	_	0	16
Special Naphthas		11	0	_	Ö	(s)	_	_	23	-11
Lubricants		23	0	_	-3	2	_	_	3	15
Waxes		2	(s)	_	0	(s)	_	_	(s)	2
Petroleum Coke		160	0	_	Ö	6	_	_	78	76
Asphalt and Road Oil		74	(s)	_	0	-15	_	_	1	88
Still Gas		153	0	_	Ő	0	_	_	0	153
Miscellaneous Products		6	0	_	0	1	_	_	(s)	5
Total	2,256	3,032	687	11	69	30	0	2,860	230	2,936

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change,

minus crude losses, minus refinery inputs, minus exports.

e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day. E = Estimated.

LRG = Liquefied Refinery Gas.

 ^{– =} Not Applicable.

Table 25. PAD District V — Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum **Products, January-August 1998**

			Supply					Dispositio	n	
Commodity	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unac- counted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 2,117	_	491	14	-65	-15	0	2,500	71	0
Natural Gas Liquids and LRGs		79	(s)	_	0	7	_	87	14	69
Pentanes Plus	51	_	0	_	0	(s)	_	41	(s)	10
Liquefied Petroleum Gases	46	79	(s)	_	0	` Ź	_	47	14	58
Ethane/Ethylene	(s)	0	`ó	_	0	0	_	0	0	(s)
Propane/Propylene		47	(s)	_	0	2	_	0	7	51
Normal Butane/Butylene		28	0	_	0	5	_	31	7	1
		4	0	_	0		_	16	0	7
Isobutane/Isobutylene	18	4	U	_	U	(s)	_	16	U	/
Other Liquids	73	_	71	_	7	-8	_	145	2	12
Other Hydrocarbons/Oxygenates	93	_	44	_	0	3	_	132	1	0
Unfinished Oils		_	23	_	-3	-3	_	10	0	12
Motor Gasoline Blend. Comp		_	5	_	10	-9		2	1	0
Aviation Gasoline Blend. Comp		_	0	_	0	(s)	_	(s)	0	0
Aviation Gasoline Biend, Comp	_	_	U	_	U	(5)	_	(5)	U	U
Finished Petroleum Products		2,814	19	_	103	-8	_	_	225	2,746
Finished Motor Gasoline	28	1,337	3	_	71	-4	_	_	21	1,422
Reformulated	_	956	0	_	6	-4	_	_	1	965
Oxygenated	68	(s)	0	_	6	3	_	_	1	71
Other		381	3	_	58	-2	_	_	19	386
Finished Aviation Gasoline		4	(s)	_	0	(s)	_	_	0	4
Jet Fuel		411	7	_	18	-4		_	10	430
Naphtha-Type			0	_	0		_		(s)	(s)
		(s)	-	_	-	(s)	_	_		
Kerosene-Type		411	7	_	18	-4	_	_	10	430
Kerosene		4	0	_	0	0	_	_	(s)	. 4
Distillate Fuel Oil		453	2	_	16	-9	_	_	38	441
0.05 percent sulfur and under	_	358	(s)	_	12	-4	_	_	10	365
Greater than 0.05 percent sulfur	_	94	2	_	4	-4	_	_	28	76
Residual Fuel Oil		202	5	_	0	5	_	_	41	161
Petrochemical Feedstocks ^e	_	10	(s)	_	0	(s)	_	_	0	10
Special Naphthas		5	(s)	_	0	(s)	_	_	14	-9
Lubricants		20	0	_	-1	-1		_	3	16
Waxes		20	(s)	_	0	(s)	_	_		2
				_	0		_	_	(s)	63
Petroleum Coke		160	1	_	-	3	_	_	96	
Asphalt and Road Oil		55	(s)	_	0	(s)	_	_	1	54
Still Gas		144	0	_	0	0	_	_	0	144
Miscellaneous Products	_	5	(s)	_	(s)	(s)	_	_	(s)	5
Total	2,314	2,893	581	14	45	-24	0	2,732	311	2,827

a Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

d Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

^e Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

⁽s) = Less than 500 barrels per day.

E = Estimated.

^{– =} Not Applicable.

Table 26. Production of Crude Oil by PAD District and State

Florida	Jar	nuary-June 1998
Florida		Daily Average
Florida	E 4.738	E 26
Pennsylvania		
Pennsylvania	18 3,116 (s) E 92	17 E ₁
Virginia E115 E Adjustmenta 5115 E Adjustmenta -50 -50 PAD District II E 16,113 E 5 Illinois 1,117 Indiana 1,72 Kansas E 3,104 E 1 Kentucky 247 E Michigan E 680 E Missouri 7 Norbraska Norbraska 267 North Dakota 2,977 Ohio 5,526 1 Oklahoma 5,526 1 South Dakota 99 1 Tennessee 18 Adjustmenta Adjustmenta 1,165 PAD District III E 100,146 E 3,3 Afkansas E 618 E Louisianab E 10,434 E 3 Mississispip E 10,434 E 3 Mexico E 5,100 E 1 Texasb 41,332 E 1,573 New Mexico E 5,100 E 1	E 6 E 922	E 5
West Virginia E 115 E Adjustmenta -50 PAD District II E 16,113 E 5 Illinois 1,117 1172 Indiana 1,127 E Kansas E 3,104 E Kentucky 247 E Michigan E 680 E Missouri 7 North Dakota 2,977 Ohio E 734 E Oklahoma 5,526 1 Oklahoma 5,526 1 Tennessee 18 Adjustmenta 1,165 PAD District III E 100,146 E 3,3 Arkansas E 618 E Louisianab E 10,0434 E 3 Mississippi 1,873 E New Mexico E 5,100 E 1 Texasb 41,332 E 1,31 Federal Offshore PAD District III E 9,301 E 3 PAD District IV E 9,901 E 3 Colorado E 1,838 E <		
Adjustment ^a -50 PAD District II		E (s) E 4
PAD District II		
Illinois	-2 -116	-1
Illinois	537 ^E 98,727	^E 545
Kansas E 3,104 E 1 Kentucky 247 247 Michigan E 680 E Missouri 7 7 Nebraska 267 North Dakota 2,977 Ohio E 734 E Oklahoma 5,526 1 South Dakota 99 1 Tennessee 18 Adjustmenta 1,165 PAD District III E 100,146 E 3,3 Arkansas E 618 E 4,44 E 5,44 Louisianab E 10,434 E 3 Mississispipi 1,873 E 5,100 E 1,873 New Mexico E 5,100 E 1,24 Texasb 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustmenta 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,593 E Utah E 1,593 E Utah	37 7,024	39
Kentucky 247 Michigan 680 E Missouri 7 Nebraska 267 North Dakota 2,977 Ohio 5,526 1 Oklahoma 5,526 1 South Dakota 99 1 Tennessee 18 Adjustmenta 1,165 PAD District III E 100,146 E 3,3 Alabama E 1,074 E Arkansas E 618 E Louisianab E 10,434 E 3 Mississippi 1,873 E New Mexico E 5,100 E 1 Texas 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustmenta 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,306 E Utah E 1,306 E Utah E 1,306 E Object	6 1.116	6
Kentucky 247 Michigan 680 E Missouri 7 Nebraska 267 North Dakota 2,977 Ohio 5,526 1 Oklahoma 5,526 1 South Dakota 99 1 Tennessee 18 Adjustmenta 1,165 PAD District III E 100,146 E 3,3 Alabama E 1,074 E Arkansas E 618 E Louisianab E 10,434 E 3 Mississippi 1,873 E New Mexico E 5,100 E 1 Texas 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustmenta 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,306 E Utah E 1,306 E Utah E 1,306 E Object	103 E 18,974	E 105
Michigan E 680 E Missouri 7 Nebraska 267 North Dakota 2,977 Chio 734 E Oklahoma 5,526 1 South Dakota 99 1 Fannessee 18 Adjustmenta 1,165 1	8 1.601	9
Missouri 7 Nebraska 267 North Dakota 2,977 Ohio E 734 E Oklahoma 5,526 1 South Dakota 99 Tennessee 18 Adjustment ^a 1,165 PAD District III E 100,146 E 3,3 Alabama E 1,074 E Arkansas E 618 E Louisiana ^b E 10,434 E 3 Mississispipi 1,873 E New Mexico E 5,100 E 1 Texas ^b 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustment ^a 1,370 E 3 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -2,21 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1	E 4,618	E 26
Nebraska 267 North Dakota 2,977 Chio 2,977 Chio 6 734 E 734 E Chiom Chiom	(s) 50	(s)
North Dakota	9 1.691	9
Ohio E734 E Oklahoma 5,526 1 South Dakota 99 18 Tennessee 18 1,165 PAD District III E 100,146 E 3,3 Alabama E 1,074 E 618 Arkansas E 618 E 10,434 E 3 Mississippi 1,873 E 5,100 E 1 New Mexico E 5,100 E 1 T 332 E 1,332 E 1,333 E 1,24 Adjustment* E 1,24 Adjustment* E 1,24 Adjustment* E 1,24 Adjustment* E 1,25 E 1,24 Adjustment* E 3,345 E 1,24	00 19.017	100
Oklahoma 5,526 1 South Dakota 99 Tennessee 18 Adjustment ^a 1,165 PAD District III E 100,146 Alabama E 1,074 Arkansas E 618 Louisiana ^b E 10,434 Mississippi 1,873 New Mexico E 5,100 Texas ^b 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustment ^a 1,370 E PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 0 1 North Slope <td>E 4,272</td> <td>E 24</td>	E 4,272	E 24
South Dakota 99 Tennessee 18 Adjustmenta 1,165 PAD District III	184 38,072	210
Tennessee 18 Adjustment ^a 1,165 PAD District III E 100,146 E 3,3 Alabama E 1,074 E 618 E Arkansas E 618 E E Louisianab E 10,434 E 3 Mississispipi 1,873 E 5,100 E 1 E 1 E 5,100 E 1 T exas ^b 41,332 1,33 E 1,332 E 1,332 E 1,33 E 1,336 E 1,2 E 1,2 Adjustment ^a E 1,370 E 1,2 E 2,0 E 1,338 E 1,2 E 1,2 E 2,0 E 1,338 E 1,20 E 2,0 E	3 630	3
Adjustment ^a 1,165 PAD District III E 100,146 E 3,3 Alabama E 1,074 E 618 E 618 Arkansas E 618 E 619 E 618 E 619 E 619 E 619 E 61 E		
PAD District III E 100,146 E 3,3 Alabama E 1,074 E 618 E 61 E		1
Alabama E 1,074 E 618 E Arkansas E 10,434 E 3 Mississippi 1,873 E 10,434 E 3 New Mexico E 5,100 E 1 E 1 E 5,100 E 1 E 1 E 1,20 E 1,20 <td< td=""><td>39 2,514</td><td>14</td></td<>	39 2,514	14
Arkansas E 618 E Louisianab E 10,434 E 3 Mississippi 1,873 E New Mexico E 5,100 E 1 Texasb 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustmenta 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustmenta -121 PAD District V E 61,746 E 2,0 Alaskab E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaskaa 0 0 Arizona 6 0 Californiab 23,428 7 Nevada 64 64 Federal Offshore PAD District V 3,845 1	338 ^E 612,576	E 3,384
Louisianab E 10,434 E 3 Mississippi 1,873 E 5,100 E 1 Texasb 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustmenta 1,370 E 38,345 E 1,2 PAD District IV E 9,901 E 3,38 E 1,2 Colorado E 1,838 E 1,306 E 1,336 E 1,306 E 1,	- 3h - h h44	<u> </u>
Mississippi 1,873 E 5,100 E 1 Texasb 41,332 1,3 Federal Offshore PAD District III 538,345 E 1,2 Adjustmenta 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E 1,2 Montana E 1,306 E 1,593 Utah E 1,593 E 1,593 Wyoming 5,285 1 Adjustmenta -121 PAD District V E 61,746 E 2,0 Alaskab E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaskaa 0 0 Arizona 6 Californiab 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	21 E 3,853	_E 21
Mississippi 1,873 E 5,100 E 1 Texasb 41,332 1,3 Federal Offshore PAD District III 538,345 E 1,2 Adjustmenta 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E 1,2 Montana E 1,306 E 1,593 Utah E 1,593 E 1,593 Wyoming 5,285 1 Adjustmenta -121 PAD District V E 61,746 E 2,0 Alaskab E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaskaa 0 0 Arizona 6 Californiab 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	348 ^E 66,218	E 366
New Mexico E 5,100 E 1 Texas ^b 41,332 1,3 Federal Offshore PAD District III E 38,345 E 1,2 Adjustment ^a 1,370 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,593 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	62 11.036	61
Texas ^b 41,332 1,3 Federal Offshore PAD District III 83,345 81,2 Adjustment ^a 1,370 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 0 47izona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	170 E 26,219	E 145
Federal Offshore PAD District III E 38,345 E 1,2 Adjustment ^a 1,370 E 38,345 E 1,2 PAD District IV E 9,901 E 3 E 1,838 E 1,306 E 1,306 E 1,306 E 1,593 E 1,20 E 1,11 E 2,0 E 1,11 E 1,22 E 1,11 E 1,22 E 1,11 E 1,11 E 1,11 E 1,11 E 1,11	378 257 308	1 422
Adjustment ^a 1,370 PAD District IV E 9,901 E 3 Colorado E 1,838 E Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	278 E 217,544	E 1,202
Colorado E 1,838 E Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 47izona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	46 23,753	131
Colorado E 1,838 E Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	330 ^E 62,091	E_343
Montana E 1,306 E Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 47izona 6 23,428 7 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	61 E _{_11,407}	E 63
Utah E 1,593 E Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 4 Arizona 6 6 California ^b 23,428 7 Nevada 64 64 Federal Offshore PAD District V 3,845 1	E 44 E 7,577	E 42
Wyoming 5,285 1 Adjustment ^a -121 PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	53 E 10.011	_ 42 _E 55
Adjustment ^a -121 PAD District V E 61,746 E 34,046 E 1,1 South Alaska 1,007 North Slope North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1		E 178
PAD District V E 61,746 E 2,0 Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	176 E 32,136	
Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	-4 959	5
Alaska ^b E 34,046 E 1,1 South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	058 ^E 386,072	E 2,133
South Alaska 1,007 North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	135 E 217,035	E 1,199
North Slope 33,040 1,1 Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	34 5,850	32
Adjustment for Alaska ^a 0 Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	101 211,185	1,167
Arizona 6 California ^b 23,428 7 Nevada 64 Federal Offshore PAD District V 3,845 1	0 0	0
California ^b 23,428 7. Nevada 64 Federal Offshore PAD District V 3,845 1.	(s) 33	(s)
Nevada 64 Federal Offshore PAD District V 3,845 1	781 141,426	781
Federal Offshore PAD District V	2 409	2
	128 23.672	131
,	12 3,496	19
U.S. Total ^b E 188,691 E 6,2	290 ^E 1,164,203	E 6.432

a These adjustments are used to reconcile the national and PAD District level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PAD District level figures published in a previous issue. Revised data at the State,

PAD District, and national levels will be published without adjustments in the *Petroleum Supply Annual*.

b Includes the following current month offshore production (thousand barrels): Alaska: State - 6,101; California: State -1,769; Louisiana: State - E1,628; Texas: State - 74; U.S. Total, including Federal offshore - E51,762.

⁽s) = Less than 500 barrels or less than 500 barrels per day. E = Estimated.

NA = Not Available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: State government agencies, U.S. Department of the Interior, Minerals Management Service and the Conservation Committee of California Oil Producers.

Table 27. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining **Districts, August 1998**

		PAD District I			PAD Dis	trict II	
Commodity	East Coast	Appalachian No. 1	Total	Ind., III., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
				Net Production	on		
Natural Gas Liquids	115	718	833	498	348	8,060	8,906
Pentanes Plus	14	83	97	102	98	1,090	1,290
Liquefied Petroleum Gases	101	635	736	396	250	6,970	7,616
Ethane	36	214	250	99	0	2,810	2,909
Propane	38	287	325	169	154	2,716	3,039
Normal Butane	27	93	120	71	96	865	1,032
Isobutane	0	41	41	57	0	579	636
				Stocks			
Natural Gas Liquids	11	35	46	85	60	2,286	2,431
Pentanes Plus	0	8	8	10	21	342	373
Liquefied Petroleum Gases	11	27	38	75	39	1,944	2,058
Ethane	0	0	0	17	0	319	336
Propane	9	18	27	33	27	1,002	1,062
Normal Butane	2	7	9	11	12	456	479
Isobutane	0	2	2	14	0	167	181

			PAD D	istrict III			PAD Dist.	PAD Dist.	
Commodity		Texas	La.				IV	V	
	Texas Inland	Gulf Coast	Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	U.S. Total
				ı	Net Product	ion			
Natural Gas Liquids	18,588	3,468	7,899	499	6,127	36,581	4,272	2,521	53,113
Pentanes Plus	3,386	562	1,504	177	717	6,346	810	1,316	9,859
Liquefied Petroleum Gases	15,202	2,906	6,395	322	5,410	30,235	3,462	1,205	43,254
Ethane	6,623	1,495	2,505	31	2,867	13,521	1,189	2	17,871
Propane	5,347	897	2,262	143	1,651	10,300	1,382	347	15,393
Normal Butane	2,225	-1,497	853	96	594	2,271	583	366	4,372
Isobutane	1,007	2,011	775	52	298	4,143	308	490	5,618
					Stocks				
Natural Gas Liquids	147	543	2,290	40	69	3,089	304	183	6,053
Pentanes Plus	63	130	546	8	0	747	124	20	1,272
Liquefied Petroleum Gases	84	413	1,744	32	69	2,342	180	163	4,781
Ethane	7	131	240	7	0	385	3	0	724
Propane	48	132	365	14	61	620	84	131	1,924
Normal Butane	20	83	754	9	4	870	63	20	1,441
Isobutane	9	67	385	2	4	467	30	12	692

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."

Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, August 1998

(Thousand Barrels, Except Where Noted)

		PAD District I			PAD Dis	strict II	
Commodity	East Coast	Appalachian No. 1	Total	Ind., III., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Crude Oil	47,714	3,012	50,726	72,067	13,869	20,561	106,497
Natural Gas Liquids	31	0	31	992	191	1,056	2,239
Pentanes Plus	0	0	0	133	122	558	813
Liquefied Petroleum Gases	31	0	31	859	69	498	1,426
Ethane	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0
Normal Butane	10	0	10	191	0	162	353
Isobutane	21	0	21	668	69	336	1,073
Other Liquids	11,123	-11	11,112	1,477	819	-429	1,867
Other Hydrocarbons/Hydrogen/Oxygenates	2,136	0	2.136	892	234	88	1,214
Other Hydrocarbons/Hydrogen	0	0	0	25	0	16	41
Oxygenates	W	W	2.136	867	234	72	1,173
Fuel Ethanol	W	W	_,W	W	W	W	1,016
Methanol	W	W	W	W	W	W	,,,, W
MTBE	W	W	2,060	W	W	W	W
Other Oxygenates ^a	W	W	2,000 W	W	W	W	W
, 0	3,085	-7	3.078	2,820	29	-524	2,325
Unfinished Oils (net)	5,065	-7 -4	5.976	-2,820 -2.216	556		-1.653
Motor Gasoline Blend. Comp. (net) Aviation Gasoline Blend. Comp. (net)	5,960 -78	0	5,976 -78	-2,216 -19	0	7 0	-1,653
Total Input to Refineries	58,868	3,001	61,869	74,536	14,879	21,188	110,603
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	1.497	97	1.594	2,427	447	665	3,540
Operable Capacity (daily average)	1.547	98	1.645	2.410	414	701	3,525
Operable Utilization Rate (percent) ^{b,c}	96.7	99.5	96.9	100.7	108.1	94.9	100.4
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Cracking	630	22	653	830	137	187	1.154
Catalytic Hydrocracking	55	0	55	141	0	4	145
Delayed and Fluid Coking	86	0	86	189	50	83	322
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	1.01	1.11	1.01	1.14	2.07	0.75	1.18
API Gravity, Weighted Average (degrees)	32.85	34.17	32.93	33.19	28.98	34.93	32.98
Operable Capacity (daily average)	1,547	98	1,645	2,410	414	701	3,525
Operating	1,453	98	1,551	2,410	414	701	3,525
Idle	94	0	94	0	0	0	0
Alaskan Crude Oil Receipts	0	0	0	92	0	0	92

See footnotes at end of table.

Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, August 1998 (Continued)

(Thousand Barrels, Except Where Noted)

			PAD D	istrict III			PAD Dist.	PAD Dist.	
Commodity	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	IV Rocky Mt.	V West Coast	U.S. Total
Crude Oil	19,080	112,319	91,015	5,817	2,883	231,114	15,695	81,436	485,468
Natural Gas Liquids	1,078	2,560	1,371	206	254	5,469	479	2,060	10,278
Pentanes Plus	566	976	299	176	133	2,150	226	932	4,121
Liquefied Petroleum Gases	512	1,584	1,072	30	121	3,319	253	1,128	6,157
Ethane	0	0	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0	0	0
Normal Butane	427	294	331	0	0	1,052	111	674	2,200
Isobutane	85	1,290	741	30	121	2,267	142	454	3,957
Other Liquids	5	6,038	1,524	-255	-205	7,107	128	5,149	25,363
Other Hydrocarbons/Hydrogen/Oxygenates	142	2,266	959	1	23	3,391	51	4,178	10,970
Other Hydrocarbons/Hydrogen	142	336	497	0	0	975	3	986	2,005
Oxygenates	0	1.930	462	W	W	2.416	48	3.192	8.965
Fuel Ethanol	W	W	W	W	W	_, v	W	W	1.047
Methanol	W	W	W	W	W	W	W	W	65
MTBE	W	1.837	W	W	W	2,270	W	3.136	7,617
Other Oxygenates ^a	W	1,037 W	W	W	W	2,270 W	W	3,130 W	236
Unfinished Oils (net)	139	5,406	1,311	-216	138	6,778	-18	982	13,145
Motor Gasoline Blend. Comp. (net)	-277	-1.634	-741	-210 -40	-366	-3.058	95	-11	,
Aviation Gasoline Blend. Comp. (net)	-2// 1	-1,634 0	-741 -5	-40 0	-300	-3,056 -4	95	-11	1,349 -101
Total Input to Refineries	20,163	120,917	93,910	5,768	2,932	243,690	16,302	88,645	521,109
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	617	3,564	2,931	176	93	7,380	518	2,775	15,806
Operable Capacity (daily average)	591	3,490	2,854	201	95 95	7,330	524	2,773	15,832
Operable Utilization Rate (percent) ^{b,c}		102.1	,	87.7		102.1	98.8	95.4	,
Operable Offitzation Rate (percent)	104.3	102.1	102.7	01.1	98.3	102.1	96.6	95.4	99.8
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Cracking	200	1,398	973	27	31	2,629	154	757	5,347
Catalytic Hydrocracking	58	239	252	0	0	550	4	470	1,223
Delayed and Fluid Coking	5	433	437	12	0	887	38	492	1,824
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.80	1.54	1.43	1.76	0.52	1.43	1.41	1.22	1.30
API Gravity, Weighted Average (degrees)	37.85	31.57	31.34	30.66	38.62	32.06	32.13	25.24	31.17
Operable Capacity (daily average)	591	3,490	2,854	201	95	7,230	524	2,907	15,832
Operating	591	3,463	2,854	201	95	7,203	524	2,886	15,689
Idle	0	27	0	0	0	27	0	22	143
Alaskan Crude Oil Receipts	0	0	0	0	0	0	0	37,354	37,446

^a Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

B Represents gross input divided by operable calendar day capacity.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

^c See Table H2 in the Highlights Section for additional information concerning utilization rates.

W = Withheld to avoid disclosure of individual company data.

Note: • Totals may not equal sum of components due to independent rounding. • Refer to Appendix A for Refining District descriptions.

Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, August 1998

		PAD District I			PAD Di	strict II	
Commodity	East Coast	Appalachian No. 1	Total	Ind., III., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases	. 1.881	75	1.956	3,578	582	520	4.680
Ethane/Ethylene		0	0	0	0	0	0
Ethane		w	w	W	W	W	w
Ethylene		W	W	W	W	W	W
Propane/Propylene		48	1,626	2,649	421	389	3,459
Propane	,	W	.,626 W	2,200	W	W	2,972
Propylene		W	W	449	W	W	487
Normal Butane/Butylene		43	399	808	117	130	1,055
Normal Butane		W	W	W	W	W	W W
Butylene		W	W	W	W	W	W
Isobutane/Isobutylene	-	-16	-69	121	44	1	166
Isobutane		W	W	W	W	w	W
Isobutylene		W	W	W	W	W	W
Finished Motor Gasoline		1,184	31,897	37,976	7,229	10,671	55,876
Reformulated		0	19,952	8,882	1.085	0	9.967
	,	0	19,952	0,002	1,629	15	1.644
Oxygenated			-	-	,		, -
Other	- , -	1,184	11,945	29,094	4,515	10,656	44,265
Finished Aviation Gasoline		0	28	77	38	56	171
Jet Fuel		49	3,475	4,774	1,114	955	6,843
Naphtha-Type		0	0	0	0	0	0
Kerosene-Type		49	3,475	4,774	1,114	955	6,843
Commercial		34	3,460	4,462	1,079	848	6,389
Military		15	15	312	35	107	454
Kerosene		43	417	456	17	11	484
Distillate Fuel Oil	,	770	13,584	16,892	3,320	6,819	27,031
0.05 percent sulfur and under	,	645	5,465	11,584	1,889	5,136	18,609
Greater than 0.05 percent sulfur		125	8,119	5,308	1,431	1,683	8,422
Residual Fuel Oil		76	4,213	1,475	355	67	1,897
Less than 0.31 percent sulfur		25	1,406	0	0	0	0
0.31 to 1.00 percent sulfur		51	2,466	439	0	0	439
Greater than 1.00 percent sulfur		0	341	1,036	355	67	1,458
Naphtha for Petrochemical Feedstock Use		0	394	581	0	-2	579
Other Oils for Petrochemical Feedstock Use		0	122	688	0	76	764
Special Naphthas	. 34	19	53	738	0	76	814
Lubricants	. 345	203	548	449	0	285	734
Naphthenic	. 0	0	0	0	0	0	0
Paraffinic	. 345	203	548	449	0	285	734
Waxes	. 0	63	63	71	0	30	101
Petroleum Coke	. 1,586	31	1,617	2,617	636	816	4,069
Marketable	. 606	0	606	1,605	473	692	2,770
Catalyst	. 980	31	1,011	1,012	163	124	1.299
Asphalt and Road Oil		428	3,501	4,389	1,934	647	6,970
Still Gas	,	80	2,161	2,980	591	833	4,404
Miscellaneous Products	,	39	70	163	68	61	292
Fuel Use		0	0	0	0	0	0
Nonfuel Use		39	70	163	68	61	292
Total	. 61,039	3,060	64,099	77,904	15,884	21,921	115,709
Processing Gain(-) or Loss(+) ^a	2,171	-59	-2,230	-3,368	-1,005	-733	-5,106

See footnotes at end of table.

Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, August 1998 (Continued)

			PAD D	istrict III	_	_	PAD Dist.	PAD Dist.		
Commodity	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	IV Rocky Mt.	V West Coast	U.S. Total	
Liquefied Refinery Gases	1,110	8,948	4,898	81	112	15,149	263	2,532	24,580	
Ethane/Ethylene	18	1,008	153	0	0	1,179	1	0	1,180	
Ethane	W	W	W	W	W	W	W	W	972	
Ethylene	W	W	W	W	W	W	W	W	208	
Propane/Propylene	644	5,417	3,823	89	65	10,038	252	1,494	16,869	
Propane		2,269	2,834	W	W	5,646	W	W	11,572	
Propylene		3,148	989	W	W	4,392	W	W	5,297	
Normal Butane/Butylene	429	2,229	879	6	47	3,590	72	947	6,063	
Normal Butane		W	W	W	W	W	W	W	5,670	
Butylene		W	W	W	W	W	W	W	393	
Isobutane/Isobutylene		294	43	-14	0	342	-62	91	468	
Isobutane		W	W	W	w	W	W	W	251	
Isobutylene		W	W	W	W	W	W	W	217	
Finished Motor Gasoline		56,417	40,964	1,628	1,551	111,191	8,220	42,925	250,109	
Reformulated		13.544	3.298	0	0	17.556	0,220	29,839	77.314	
Oxygenated		0	21	0	34	55	134	29,039	1,833	
Other		42,873	37,645	1,628	1,517	93.580	8,086	13,086	170.962	
Finished Aviation Gasoline	- , -	42,673 194	64	0 1,020	1,317	437	19	13,066	770,962	
			12,080	186	224					
Jet Fuel	,	11,266	,			25,333	741	13,350	49,742	
Naphtha-Type		0	0	0	0	1	0	10	11	
Kerosene-Type		11,266	12,080	186	224	25,332	741	13,340	49,731	
Commercial		9,843	11,697	90	0	22,891	560	11,680	44,980	
Military		1,423	383	96	224	2,441	181	1,660	4,751	
Kerosene		1,292	351	66	-1	1,712	31	123	2,767	
Distillate Fuel Oil	,	22,362	19,087	1,345	804	48,279	4,274	14,454	107,622	
0.05 percent sulfur and under		16,221	9,943	597	790	31,178	3,580	12,134	70,966	
Greater than 0.05 percent sulfur		6,141	9,144	748	14	17,101	694	2,320	36,656	
Residual Fuel Oil		5,183	5,224	148	14	10,921	342	6,755	24,128	
Less than 0.31 percent sulfur		182	333	0	0	789	56	192	2,443	
0.31 to 1.00 percent sulfur	13	506	1,076	120	14	1,729	14	1,069	5,717	
Greater than 1.00 percent sulfur	65	4,495	3,815	28	0	8,403	272	5,494	15,968	
Naphtha for Petrochemical Feedstock Use	119	5,465	978	0	1	6,563	0	126	7,662	
Other Oils for Petrochemical Feedstock Use	179	2,749	3,194	0	0	6,122	22	292	7,322	
Special Naphthas	102	842	155	178	0	1,277	0	355	2,499	
Lubricants	W	1,962	W	W	W	4,088	0	717	6,087	
Naphthenic	W	369	W	W	W	971	0	280	1,251	
Paraffinic		1,593	W	W	W	3,117	0	437	4,836	
Waxes		249	124	107	0	480	109	62	815	
Petroleum Coke		6,092	4,803	66	36	11,318	508	4,957	22,469	
Marketable		4,021	3,642	49	0	7,746	280	3,780	15,182	
Catalyst		2,071	1,161	17	36	3,572	228	1,177	7,287	
Asphalt and Road Oil		1,311	1,632	1.144	145	4.875	1,597	2,294	19,237	
Still Gas		5,076	3,865	197	79	10,018	667	4,753	22,003	
Miscellaneous Products		448	554	0	0	1,071	55	180	1,668	
Fuel Use		0	232	0	0	232	0	-24	208	
Nonfuel Use		448	322	0	0	839	55	204	1,460	
Total	20,824	129,856	99,389	5,800	2,965	258,834	16,848	93,990	549,480	
Processing Gain(-) or Loss(+) ^a	661	-8,939	-5,479	-32	-33	-15,144	-546	-5,345	-28,371	

 ^a Represents the arithmetic difference between input and production.
 W = Withheld to avoid disclosure of individual company data.
 Note: Refer to Appendix A for Refining District descriptions.
 Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, August 1998

		PAD District I			PAD District II					
Commodity	East Coast	Appalachian No. 1	Total	Ind., III., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total			
Crude Oil	. 13,326	340	13,666	9,930	1,840	2,993	14,763			
Petroleum Products	. 57,282	2,161	59,443	43,080	10,724	12,543	66,347			
Pentanes Plus	. 0	0	0	6	52	354	412			
Liquefied Petroleum Gases	. 2,902	52	2,954	3,002	754	1,680	5,436			
Ethane/Ethylene	. 0	0	0	3	0	0	3			
Propane/Propylene		6	657	1,605	29	629	2,263			
Normal Butane/Butylene		44	1,965	1,149	648	897	2,694			
Isobutane/Isobutylene	, -	2	332	245	77	154	476			
Other Hydrocarbons/Hydrogen/Oxygenates		6	1.718	324	98	64	486			
Other Hydrocarbons/Hydrogen	,	0	0	24	0	0	24			
Oxygenates		w	1.718	300	98	64	462			
Fuel Ethanol		W	1,710 W	W	W	W	274			
Methanol		W	W	W	W	W	W			
MTBE		W	1,205	W	W	W	W			
		W	1,203 W	W	W	W	W			
Other Oxygenates ^a										
Unfinished Oils		593	11,419	10,053	662	3,771	14,486			
Naphthas and Lighter		247	2,189	2,798	295	1,050	4,143			
Kerosene and Light Gas Oils		4	1,920	1,652	53	319	2,024			
Heavy Gas Oils	,	313	5,852	3,277	216	1,503	4,996			
Residuum		29	1,458	2,326	98	899	3,323			
Motor Gasoline Blending Components		31	5,899	7,174	892	888	8,954			
Aviation Gasoline Blending Components		0	77	33	0	0	33			
Finished Motor Gasoline	. 9,908	354	10,262	6,394	1,463	1,559	9,416			
Reformulated	. 6,129	0	6,129	416	0	0	416			
Oxygenated	. 0	7	7	0	213	0	213			
Other	. 3,779	347	4,126	5,978	1,250	1,559	8,787			
Finished Aviation Gasoline	. 42	0	42	34	49	47	130			
Jet Fuel	. 1,245	20	1,265	2,780	173	395	3,348			
Naphtha-Type		0	0	0	0	0	0			
Kerosene-Type	. 1,245	20	1,265	2,780	173	395	3,348			
Kerosene		49	309	195	66	44	305			
Distillate Fuel Oil		243	16,139	6,294	2.012	2,119	10.425			
0.05 percent sulfur and under		221	3.029	4.070	1.123	1.362	6.555			
Greater then 0.05 percent sulfur	,	22	13,110	2,224	889	757	3,870			
Residual Fuel Oil	,	53	5,358	1.513	294	73	1.880			
Less than 0.31 percent sulfur		25	1,281	0	0	0	0			
0.31 to 1.00 percent sulfur		28	2.532	254	0	1	255			
•	,	0	1,545	1.259	294	72	1.625			
Greater than 1.00 percent sulfur	,	0	504	1,239	294	1	1,025			
Naphtha for Petrochemical Feedstock Use		-			-	-				
Other Oils for Petrochemical Feedstock Use		0	0	63	0	0	63			
Special Naphthas		14	73	312	0	30	342			
Lubricants		332	643	543	0	0	543			
Waxes		55	55	119	0	61	180			
Petroleum Coke (Marketable)		0	601	798	2,437	415	3,650			
Asphalt and Road Oil	,	311	2,073	3,153	1,756	1,013	5,922			
Miscellaneous Products	. 4	48	52	95	16	29	140			
Total Stocks, All Oils	. 70,608	2,501	73,109	53,010	12,564	15,536	81,110			

See footnotes at end of table.

Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, August 1998 (Continued)

			PAD Di	strict III			PAD Dist.	PAD Dist.	
Commodity	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	IV Rocky Mt.	V West Coast	U.S. Total
Crude Oil	1,037	29,447	19,231	1,130	356	51,201	2,116	22,451	104,197
Petroleum Products	13,109	72,404	58,592	4,590	1,566	150,261	10,334	63,083	349,468
Pentanes Plus	243	179	13	20	6	461	18	0	891
Liquefied Petroleum Gases	4,125	4,691	6,950	196	55	16,017	466	1,502	26,375
Ethane/Ethylene	113	614	0	0	0	727	0	0	730
Propane/Propylene		1,942	974	4	4	5,006	107	178	8,211
Normal Butane/Butylene		1.357	5,335	171	35	8.379	243	929	14,210
Isobutane/Isobutylene	,	778	641	21	16	1,905	116	395	3,224
Other Hydrocarbons/Hydrogen/Oxygenates		1.458	599	4	15	2.121	148	2,763	7.236
Other Hydrocarbons/Hydrogen		0	1	0	0	1	0	2,700	29
Oxygenates		1.458	598	w	w	2,120	148	2,759	7,207
Fuel Ethanol		1,430 W	W	W	W	2,120 W	W	2,733 W	471
Methanol		W	W	W	W	W	W	W	863
MTBE		1.145	W	W	W	1.679	W	2,663	5,765
Other Oxygenates ^a	W	1,143 W	W	W	W	1,079 W	W	2,003 W	108
Unfinished Oile	VV								
Unfinished Oils		23,225	21,048	1,110	489	48,487	2,419	20,091	96,902
Naphthas and Lighter		5,879	4,229	289	169	11,445	565	2,958	21,300
Kerosene and Light Gas Oils		4,180	3,075	281	70	7,913	365	5,213	17,435
Heavy Gas Oils		9,697	10,414	485	250	21,745	1,068	9,029	42,690
Residuum		3,469	3,330	55	0	7,384	421	2,891	15,477
Motor Gasoline Blending Components		6,434	4,932	138	421	13,167	1,507	7,108	36,635
Aviation Gasoline Blending Components		0	24	0	0	31	0	2	143
Finished Motor Gasoline	1,788	10,110	6,933	327	125	19,283	2,032	10,686	51,679
Reformulated	176	3,174	353	0	0	3,703	0	6,821	17,069
Oxygenated	0	0	0	0	0	0	0	0	220
Other	1,612	6,936	6,580	327	125	15,580	2,032	3,865	34,390
Finished Aviation Gasoline	69	180	93	0	0	342	24	204	742
Jet Fuel	483	4,986	3,101	103	43	8,716	400	4,371	18,100
Naphtha-Type		0	0	0	0	. 1	0	37	38
Kerosene-Type		4,986	3,101	103	43	8,715	400	4,334	18,062
Kerosene		569	260	32	14	898	83	80	1.675
Distillate Fuel Oil		9,217	5,245	515	232	16,420	1,241	5,459	49,684
0.05 percent sulfur and under		5.697	2.141	272	141	8.846	948	4.114	23.492
Greater then 0.05 percent sulfur		3,520	3,104	243	91	7,574	293	1,345	26,192
Residual Fuel Oil		2.799	3,120	111	6	6.268	529	4,925	18.960
Less than 0.31 percent sulfur		100	3,120	0	0	143	36	759	2,219
		211	376	69	6	665	290	885	4.627
0.31 to 1.00 percent sulfur					-				, -
Greater than 1.00 percent sulfur		2,488	2,733	42	0	5,460	203	3,281	12,114
Naphtha for Petrochemical Feedstock Use		533	341	0	19	920	0	98	1,718
Other Oils for Petrochemical Feedstock Use		1,585	679	0	0	2,357	1	217	2,638
Special Naphthas		1,208	45	117	0	1,403	0	56	1,874
Lubricants		2,696	1,697	870	0	5,294	0	1,074	7,554
Waxes		285	246	28	0	559	52	190	1,036
Petroleum Coke (Marketable)		1,515	2,227	0	0	3,742	246	2,459	10,698
Asphalt and Road Oil		547	575	1,019	141	3,087	1,167	1,681	13,930
Miscellaneous Products	37	187	464	0	0	688	1	117	998
Total Stocks, All Oils	14,146	101,851	77,823	5,720	1,922	201,462	12,450	85,534	453,665

^a Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

motor gasoline blending (e.g., isopropyl ether (IPB) or n-propanol).

W = Withheld to avoid disclosure of individual company data.

Notes: • Stocks are reported as of the last day of the month. • Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 31. Percent Refinery Yield of Petroleum Products by PAD and Refining Districts,^a August 1998

		PAD District I			PAD Di	strict II	
Commodity	East Coast	Appalachian No. 1	Total	Ind., III., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
iquefied Refinery Gases	3.7	2.5	3.6	4.8	4.2	2.6	4.3
Finished Motor Gasoline ^b	44.4	39.5	44.1	51.2	45.0	47.5	49.7
Finished Aviation Gasoline ^c	0.2	0.0	0.2	0.1	0.3	0.3	0.2
Naphtha-Type Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	6.7	1.6	6.5	6.4	8.0	4.8	6.3
Kerosene	0.7	1.4	0.8	0.6	0.1	0.1	0.4
Distillate Fuel Oil	25.2	25.6	25.2	22.6	23.9	34.0	24.8
Residual Fuel Oil	8.1	2.5	7.8	2.0	2.6	0.3	1.7
Naphtha for Petrochemical Feedstock Use	0.8	0.0	0.7	0.8	0.0	0.0	0.5
Other Oils for Petrochemical Feedstock Use	0.2	0.0	0.2	0.9	0.0	0.4	0.7
Special Naphthas	0.1	0.6	0.1	1.0	0.0	0.4	0.7
ubricants	0.7	6.8	1.0	0.6	0.0	1.4	0.7
Vaxes	0.0	2.1	0.1	0.1	0.0	0.1	0.1
Petroleum Coke	3.1	1.0	3.0	3.5	4.6	4.1	3.7
Asphalt and Road Oil	6.0	14.2	6.5	5.9	13.9	3.2	6.4
Still Gas	4.1	2.7	4.0	4.0	4.3	4.2	4.0
Miscellaneous Products	0.1	1.3	0.1	0.2	0.5	0.3	0.3
Processing Gain(-) or Loss(+) ^d	-4.3	-2.0	-4.1	-4.5	-7.2	-3.7	-4.7

			PAD D	istrict III			PAD Dist.	PAD Dist.	
Commodity	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	V West Coast	U.S. Total
Liquefied Refinery Gaseş	5.8	7.6	5.3	1.4	3.7	6.4	1.7	3.1	4.9
Finished Motor Gasoline ^b	50.4	45.2	42.6	26.1	54.3	44.3	48.4	44.5	45.6
Finished Aviation Gasoline ^c	0.9	0.2	0.1	0.0	0.0	0.2	0.1	0.1	0.2
Naphtha-Type Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	8.2	9.6	13.1	3.3	7.4	10.6	4.7	16.2	10.0
Kerosene	0.0	1.1	0.4	1.2	0.0	0.7	0.2	0.1	0.6
Distillate Fuel Oil	24.4	19.0	20.7	24.0	26.6	20.3	27.3	17.5	21.6
Residual Fuel Oil	1.8	4.4	5.7	2.6	0.5	4.6	2.2	8.2	4.8
Naphtha for Petrochemical Feedstock Use	0.6	4.6	1.1	0.0	0.0	2.8	0.0	0.2	1.5
Other Oils for Petrochemical Feedstock Use	0.9	2.3	3.5	0.0	0.0	2.6	0.1	0.4	1.5
Special Naphthas	0.5	0.7	0.2	3.2	0.0	0.5	0.0	0.4	0.5
_ubricants	0.3	1.7	1.5	11.7	0.0	1.7	0.0	0.9	1.2
Naxes	0.0	0.2	0.1	1.9	0.0	0.2	0.7	0.1	0.2
Petroleum Coke	1.7	5.2	5.2	1.2	1.2	4.8	3.2	6.0	4.5
Asphalt and Road Oil	3.3	1.1	1.8	20.4	4.8	2.0	10.2	2.8	3.9
Still Gas	4.2	4.3	4.2	3.5	2.6	4.2	4.3	5.8	4.4
Miscellaneous Products	0.4	0.4	0.6	0.0	0.0	0.5	0.4	0.2	0.3
Processing Gain(-) or Loss(+) ^d	-3.4	-7.6	-5.9	-0.6	-1.1	-6.4	-3.5	-6.5	-5.7

a Based on crude oil input and net reruns of unfinished oils.
 b Based on total finished motor gasoline output minus net input of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and oxygenates.
 c Based on finished aviation gasoline output minus net input of aviation gasoline blending components.
 d Represents the difference between input and production.
 Notes: • Totals may not equal sum of components due to independent rounding. • Refer to Appendix A for Refining District descriptions.
 Sources: Calculated from data on Tables 28 and 29.

Table 32. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, August 1998

		Residu	al Fuel Oil	
PAD District and State of Entry	Less than 0.31% Sulfur	0.31 to 1.00% Sulfur	Greater than 1.00% Sulfur	Total
PAD District I	934	2,956	3,129	7,019
Delaware	0	0	320	320
Florida	79	0	265	344
Maine	7	0	120	127
Maryland	0	620	204	824
Massachusetts	0	109	0	109
New Hampshire	0	0	150	150
New Jersey	68	1,208	1,068	2,344
New York	431	938	392	1,761
North Carolina	0	0	126	126
Pennsylvania	0	0	236	236
South Carolina	25	0	165	190
Vermont	0	0	2	2
Virginia	324	81	81	486
PAD District II	31	0	44	75
Michigan	31	0	44	75
J.S. Total	965	2,956	3,173	7,094

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 33. Imports of Crude Oil and Petroleum Products by PAD District, August 1998

		Petroleu	m Administrati	on for Defens	e Districts		
Commodity	1	П	Ш	IV	v	U.S. Total	Daily Average
Crude Oil ^{a,b}	45,516	50,433	164,040	4,429	19,017	283,435	9,143
Natural Gas Liquids	758	1,868	4,600	318	4	7,548	243
Pentanes Plus	0	30	1,252	192	0	1,474	48
Liquefied Petroleum Gases	758	1,838	3,348	126	4	6,074	196
Ethane	0	0	434	0	0	434	14
Ethylene	0	4	0	0	0	4	(s)
Propane	749	1,253	2,551	119	4	4,676	151
Propylene	0	195	0	0	0	195	6
Normal Butane	9	120	224	7	0	360	12
Butylene	0	0 266	0 139	0	0	0 405	0 13
IsobutaneIsobutylene	0	0	0	0	0	0	0
Other Liquids	5,183	1	5,825	0	1,692	12,701	410
Other Hydrocarbons/Hydrogen/Oxygenates	47	0	0	0	1,135	1,182	38
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	47	0	0	0	1,135	1,182	38
Fuel Ethanol	0	0	0	0	5	5	(s)
MTBE	47	0	0	0	1,130	1,177	38
Other Oxygenates ^c	0	0	0	0	0	0	0
Unfinished Oils ^a	811	1	5,704	0	557	7,073	228
Naphthas and Lighter	241	1	862	0	0	1,104	36
Kerosene and Light Gas Oils	0	0	0	0	0	0	0
Heavy Gas Oils Residuum	570 0	0	3,437 1,405	0	0 557	4,007	129 63
Motor Gasoline Blending Components	4,325	0	1,405	0	0	1,962 4,446	143
Aviation Gasoline Blending Components	4,323	0	0	0	0	4,440	0
		-			O		-
Finished Petroleum Products	25,057	358	5,803	229	576	32,023	1,033
Finished Motor Gasoline	9,628	64	237	18	15	9,962	321
Reformulated	4,949	0	237	0	0	5,186	167
Oxygenated	0 4.670	0 64	0	0 18	0 15	0 4 776	0 151
Other Finished Aviation Gasoline	4,679 0	1	0	1	15	4,776 3	154 (s)
Jet Fuel	1,651	0	0	0	508	2,159	70
Naphtha-Type	0	0	0	0	0	2,100	0
Kerosene-Type	1,651	Ő	0	Ö	508	2,159	70
Bonded Aircraft Fuel	691	Ö	0	Ö	3	694	22
Other	960	0	0	0	505	1,465	47
Kerosene	1	0	0	0	0	1	(s)
Distillate Fuel Oil	5,058	99	0	204	15	5,376	173
Bonded Ship Bunkers	0	0	0	6	15	21	. 1
0.05 percent sulfur and under	0	0	0	6	0	6	(s)
Greater than 0.05 percent sulfur	0	0	0	0	15	15	(s)
Other	5,058	99	0	198	0	5,355	173
0.05 percent sulfur and under	3,111	75 24	0	85 113	0	3,271 2.084	106 67
Residual Fuel Oil	1,947 7,019	75	0	0	0	7,094	229
Bonded Ship Bunkers	7,019	0	0	0	0	7,094	0
Less than 0.31 percent sulfur	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur	0	0	0	0	0	Ő	0
Greater than 1.00 percent sulfur	Ö	Õ	Ö	Ö	Ö	Ö	Ö
Other	7,019	75	0	0	0	7,094	229
Less than 0.31 percent sulfur	934	31	0	0	0	965	31
0.31 to 1.00 percent sulfur	2,956	0	0	0	0	2,956	95
Greater than 1.00 percent sulfur	3,129	44	0	0	0	3,173	102
Naphtha for Petrochemical Feedstock Use	301	35	1,523	0	24	1,883	61
Other Oils for Petrochemical Feedstock Use	0	0	3,955	0	0	3,955	128
Special Naphthas	102	34	70	0	0	206	7
Lubricants	263	26 10	11	0	0	300	10
Waxes Petroleum Coke	24 0	10 0	2 0	0	5 0	41 0	1
Asphalt and Road Oil	1,010	14	0	6	8	1,038	33
Miscellaneous Products	1,010	0	5	0	0	1,036	(s)
	· ·	O .	9	O	O	J	(3)

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

c Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 34. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January-August 1998

Commodity			Petrole	um Administra	tion for Defen	se Districts		
Natural Gas Liquids	Commodity	ı	II	III	IV	V		Daily Averag
Pentanes Plus	d,b	376,834	402,925	1,155,358	31,652	119,333	2,086,102	8,585
Pentanes Plus	s Liquids	5.933	20.605	30.915	2.517	20	59.990	247
Liquelied Petroleum Gases		-,		,	,		,	27
Ethylene		5,933	20,355		1,573	20	53,502	220
Proppiene	ne	0	0	3,991	0	0	3,991	16
Propylene		-	86	0	-	-	86	(s)
Normal Butane		,		14,296	1,032		,	149
Bullylene			,		-	-	,	7
Sobulyane						-		29
Isobutylene						-	-	0 19
Other Hydrocarbons/Hydrogene 3.793 0 22 0 10,634 14,449 Other Hydrocarbons/Hydrogen 31 0 0 0 0 34 14,418 Fuel Ethanol 0 0 0 0 0 5 5 MTBE 3,762 0 22 0 10,629 14,413 Other Oxygenates* 0 0 0 0 0 0 Other Oxygenates* 6.809 185 51,133 0 5,483 63,610 Naphthas and Lighter 316 8 10,538 0 0 10,862 Kerosene and Light Gas Olls 6221 177 25,293 0 0 272 Heavy Gas Olls 6,221 177 25,293 0 5,483 20,785 Motation Gasoline Blending Components 44,570 6 1,567 0 1,105 47,248 Aviation Gasoline Blending Components 44,570 6 1,572 1,406 4,517 <td></td> <td></td> <td>,</td> <td>,</td> <td>-</td> <td>-</td> <td>,</td> <td>0</td>			,	,	-	-	,	0
Other Hydrocarbons/Hydrogen 31 0 22 0 10,634 14,449 Other Hydrocarbons/Hydrogen 31 0 0 0 0 34 14,418 Fuel Ethanol 0 0 0 0 0 5 5 MTBE 3,762 0 22 0 10,629 14,413 Other Oxygenates ^C 0 0 0 0 0 0 Other Oxygenates ^C 6,809 185 51,133 0 5,843 63,610 Naphribas and Lighter 316 8 10,538 0 0 10,862 Kerosene and Light Cas Olis 272 0 0 0 0 272 Heavy Gas Olis 6,221 177 25,293 0 5,483 20,785 Motor Gasoline Blending Components 44,570 6 1,567 0 1,105 47,248 Aviation Gasoline Blending Components 44,570 6 1,567 0 0 0 <td>iids</td> <td>55.172</td> <td>191</td> <td>52,722</td> <td>0</td> <td>17.222</td> <td>125.307</td> <td>516</td>	iids	55.172	191	52,722	0	17.222	125.307	516
Other Hydrocarbons/Hydrogen		,		,		,	,	59
Oxygenates		,	0		0			(s)
MTBE Other Orygenates ^{cs} 3,762 0 22 0 10,629 14,413 Other Orygenates ^{cs} 0 0	enates	,				10,634	,	5 9
Other Oxygenates ⁶ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 10,862 63,610 Naphthas and Lighter 316 8 10,538 0 0 0 0 272 0 0 0 0 272 148 0 0 0 0 0 0 272 148 0 0 0 0 10,862 272 0 0 0 31,691 31,472 32,633 31,691 31,472 31,472 31,472 32,633 31,710 31,424 31,472 32,72 32,72 31,442 32,72 32,72		-	-					(s)
Unfinished Oils ^a 6,809 185 51,133 0 5,483 63,610 Naphthas and Lighter 316 8 10,538 0 0 0 10,862 Kerosene and Light Gas Oils 272 0 0 0 0 0 0 272 Heavy Gas Oils 6,221 177 25,293 0 0 0 31,691 Residuum 0 0 0 15,302 0 5,483 20,785 Motor Gasoline Blending Components 44,570 6 1,567 0 1,105 47,248 Aviation Gasoline Blending Components 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		,						59
Naphthas and Lighter						-	-	0
Rerosene and Light Caso Oils		,					,	262
Heavy Gas Oils							,	45
Residuum			-					1 130
Motor Gasoline Blending Components 44,570 6 1,567 0 1,105 47,248 Aviation Gasoline Blending Components 0 30 33,379 0 1,342 0		,					,	86
Aviation Gasoline Blending Components				,		,	,	194
Finished Motor Gasoline	5 1	,		,		,	,	0
Finished Motor Gasoline	etroleum Products	187.958	3.152	59.270	1.406	4.517	256.303	1,055
Oxygenated 0 0 0 0 0 0 Other 31,586 1,110 520 142 847 34,205 Finished Aviation Gasoline 1 19 0 1 15 36 Jet Fuel 16,720 0 9 0 1,624 18,353 Naphthar-Type 16,720 0 9 0 1,624 18,353 Naphthar-Type 16,720 0 9 0 1,624 18,353 Bonded Aircraft Fuel 10,202 0 0 0 16 10,218 Other 6,518 0 9 0 1,608 8,135 Kerosene 206 0 0 0 0 0 206 Distillate Fuel Oil 44,165 800 0 1,200 502 46,667 Bonded Ship Bunkers 0 0 0 17 431 444 0.05 percent sulfur and under 0 0 <		,		,	,	,	,	299
Other 31,586 1,110 520 142 847 34,205 Finished Aviation Gasoline 1 19 0 1 15 36 Jet Fuel 16,720 0 9 0 1,624 18,353 Naphtha-Type 0 0 0 0 0 0 0 Kerosene-Type 16,720 0 9 0 1,624 18,353 Bonded Aircraft Fuel 10,202 0 0 0 16 10,218 Other 6,518 0 9 0 1,608 8,135 Kerosene 206 0 0 0 0 0 20 Bonded Ship Bunkers 0 0 0 1,700 502 46,667 Bonded Ship Bunkers 0 0 0 17 431 448 0.05 percent sulfur and under 0 0 0 17 29 46 Greater than 0.05 percent sulfur 20,205	mulated	37,037	0	1,342	0	0	38,379	158
Finished Aviation Gasoline	enated	-	-			-	-	0
Detail		31,586						141
Naphtha-Type		1			-			(s)
Kerosene-Type 16,720 0 9 0 1,624 18,353 Bonded Aircraft Fuel 10,202 0 0 0 16 10,218 Other 6,518 0 9 0 1,608 8,135 Kerosene 206 0 0 0 0 0 206 Distillate Fuel Oil 44,165 800 0 1,200 502 46,667 Bonded Ship Bunkers 4 0 0 0 1,7 431 444 Bonded Ship Bunkers 0 0 0 0 1,7 431 444 0.05 percent sulfur and under 0 0 0 0 402 402 Greater than 0.05 percent sulfur 23,960 571 0 378 71 24,980 Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442		,				,	,	76 0
Bonded Aircraft Fuel		-	-				-	76
Other 6,518 0 9 0 1,608 8,135 Kerosene 206 0 0 0 0 206 Distillate Fuel Oil 44,165 800 0 1,200 502 46,667 Bonded Ship Bunkers 0 0 0 17 431 448 0.05 percent sulfur and under 0 0 0 17 29 46 Greater than 0.05 percent sulfur 0 0 0 0 402 402 Other 44,165 800 0 1,183 71 46,219 0.05 percent sulfur and under 23,960 571 0 378 71 24,980 Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 0 0 0 0 0 0 0 <t< td=""><td></td><td>,</td><td></td><td></td><td></td><td></td><td>,</td><td>42</td></t<>		,					,	42
Kerosene 206 0 0 0 0 206 Distillate Fuel Oil 44,165 800 0 1,200 502 46,667 Bonded Ship Bunkers 0 0 0 17 431 448 0.05 percent sulfur and under 0 0 0 17 29 46 Greater than 0.05 percent sulfur 0 0 0 0 402 402 Other 44,165 800 0 1,183 71 24,980 Greater than 0.05 percent sulfur 23,960 571 0 378 71 24,980 Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 0 0 0 0 0 0 Bordeater Ship Bunkers 0 0 0 0 0 0 0		,					,	33
Distillate Fuel Oil			-		-	,		1
Bonded Ship Bunkers 0 0 0 17 431 448 0.05 percent sulfur and under 0 0 0 17 29 46 Greater than 0.05 percent sulfur 0 0 0 0 402 402 Other 44,165 800 0 1,183 71 46,219 0.05 percent sulfur and under 23,960 571 0 378 71 24,980 Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 <td></td> <td></td> <td>800</td> <td>0</td> <td>1,200</td> <td>502</td> <td></td> <td>192</td>			800	0	1,200	502		192
Greater than 0.05 percent sulfur 0 0 0 0 402 402 Other 44,165 800 0 1,183 71 46,219 0.05 percent sulfur and under 23,960 571 0 378 71 24,980 Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 0 0 0 0 0 0 Less than 0.31 percent sulfur 0 0 0 0 0 0 0 Other 47,143 247 1,857 0 1,195 50,442 Less than 0.31 percent sulfur 0 0 0 0 0 0 0 Other 47,143 247 1,857 0 1,195 50,442 1,431 1,44 1,44 1,44 1,44 1,44 1,44 1,44 <td></td> <td>0</td> <td>0</td> <td>0</td> <td>17</td> <td>431</td> <td>448</td> <td>2</td>		0	0	0	17	431	448	2
Other 44,165 800 0 1,183 71 46,219 0.05 percent sulfur and under 23,960 571 0 378 71 24,980 Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 0 0 0 0 0 0 Less than 0.31 percent sulfur 0 0 0 0 0 0 0 Greater than 1.00 percent sulfur 0	05 percent sulfur and under	0	0	0	17	29	46	(s)
0.05 percent sulfur and under 23,960 571 0 378 71 24,980 Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 0 0 0 0 0 0 0 Less than 0.31 percent sulfur 0	eater than 0.05 percent sulfur							2
Greater than 0.05 percent sulfur 20,205 229 0 805 0 21,239 Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 0 0 0 0 0 0 Less than 0.31 percent sulfur 0 0 0 0 0 0 0 Greater than 1.00 percent sulfur 0 0 0 0 0 0 0 Other 47,143 247 1,857 0 1,195 50,442 50,442 6 6 0 1,195 50,442 1,195 50,442 1,195 50,442 1,195		,						190
Residual Fuel Oil 47,143 247 1,857 0 1,195 50,442 Bonded Ship Bunkers 0 0 0 0 0 0 0 0 Less than 0.31 percent sulfur 0 0 0 0 0 0 0 0 0.31 to 1.00 percent sulfur 0 1,195 50,442 1,195 50,442 1,195 50,442 1,195 50,442 1,195 1,195		,					,	103
Bonded Ship Bunkers 0 0 0 0 0 0 Less than 0.31 percent sulfur 0 0 0 0 0 0 0 0.31 to 1.00 percent sulfur 0 0 0 0 0 0 0 Greater than 1.00 percent sulfur 0 0 0 0 0 0 0 0 Other 47,143 247 1,857 0 1,195 50,442 1,195 50,442 1,195 1,195 50,442 1,195 1,195 50,442 1,195 1,195 50,442 1,195 1,195 50,442 1,195 1,195 50,442 1,195 1,195 1,195 1,195 1,195 1,142 1,1331 1,195 1,142 1,1331 1,195 1,142 1,1331 1,195 1,142 1,1331 1,142 1,1331 1,142 1,1331 1,142 1,144 1,144 1,144 1,144 1,144 1,144 1,144 1,144 1,144 <td></td> <td>,</td> <td></td> <td>-</td> <td></td> <td>-</td> <td>,</td> <td>87</td>		,		-		-	,	87
Less than 0.31 percent sulfur 0 0 0 0 0 0 0 0.31 to 1.00 percent sulfur 0 11,331 0.31 to 1.00 percent sulfur 12,546 0 0 0 0 0 12,546 0 0 0 0 0 12,546 0 0 0 0 0 12,546 0 0 0 0 12,546 0 0 0 0 0 0 0		,						208
0.31 to 1.00 percent sulfur 0 1,195 50,442 2 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,195 50,442 2 1,1331 0 1,195 50,442 2 1,1331 0 1,155 1,1331 0 1,195 50,442 2 1,1331 0 1,155 1,1331 0 1,155 1,155 1,155 1,1331 1,155 1,155 1,155 1,155 1,155 1,155 1,155							-	0
Greater than 1.00 percent sulfur 0 0 0 0 0 0 Other 47,143 247 1,857 0 1,195 50,442 Less than 0.31 percent sulfur 9,704 159 906 0 562 11,331 0.31 to 1.00 percent sulfur 12,546 0 0 0 0 12,546 Greater than 1.00 percent sulfur 24,893 88 951 0 633 26,565 Naphtha for Petrochemical Feedstock Use 2,072 274 12,596 0 99 15,041 Other Oils for Petrochemical Feedstock Use 0 0 42,032 0 0 42,032 Special Naphthas 781 300 601 0 3 1,685 Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 0 194 194							-	0
Other 47,143 247 1,857 0 1,195 50,442 Less than 0.31 percent sulfur 9,704 159 906 0 562 11,331 0.31 to 1.00 percent sulfur 12,546 0 0 0 0 12,546 Greater than 1.00 percent sulfur 24,893 88 951 0 633 26,565 Naphtha for Petrochemical Feedstock Use 2,072 274 12,596 0 99 15,041 Other Oils for Petrochemical Feedstock Use 0 0 42,032 0 0 42,032 Special Naphthas 781 300 601 0 3 1,685 Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352			-	-		-	-	0
Less than 0.31 percent sulfur 9,704 159 906 0 562 11,331 0.31 to 1.00 percent sulfur 12,546 0 0 0 0 12,546 Greater than 1.00 percent sulfur 24,893 88 951 0 633 26,565 Naphtha for Petrochemical Feedstock Use 2,072 274 12,596 0 99 15,041 Other Oils for Petrochemical Feedstock Use 0 0 42,032 0 0 42,032 Special Naphthas 781 300 601 0 3 1,685 Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352		-		-		-	-	208
0.31 to 1.00 percent sulfur 12,546 0 0 0 0 12,546 Greater than 1.00 percent sulfur 24,893 88 951 0 633 26,565 Naphtha for Petrochemical Feedstock Use 2,072 274 12,596 0 99 15,041 Other Oils for Petrochemical Feedstock Use 0 0 42,032 0 0 42,032 Special Naphthas 781 300 601 0 3 1,685 Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352		,		,			,	47
Greater than 1.00 percent sulfur 24,893 88 951 0 633 26,565 Naphtha for Petrochemical Feedstock Use 2,072 274 12,596 0 99 15,041 Other Oils for Petrochemical Feedstock Use 0 0 42,032 0 0 42,032 Special Naphthas 781 300 601 0 3 1,685 Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352	·				0			52
Other Oils for Petrochemical Feedstock Use 0 0 42,032 0 0 42,032 Special Naphthas 781 300 601 0 3 1,685 Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352	eater than 1.00 percent sulfur	24,893	88	951	0	633		109
Special Naphthas 781 300 601 0 3 1,685 Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352								62
Lubricants 2,046 188 47 0 0 2,281 Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352				,			,	173
Waxes 209 91 24 0 18 342 Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352								7
Petroleum Coke 0 0 0 0 194 194 Asphalt and Road Oil 5,941 115 221 63 12 6,352		,						9
Asphalt and Road Oil								1
								1 26
		,						(s)
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^a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending e.g., isopropyl ether (IPE) or n-propanol).

⁽s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 35. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, August 1998

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	76.349	2,067	501	106	466	0	23	1.018	0	0
Algeria	296	2,067	501	0	0	0	0	1,018	0	0
Iraq	22.093	0	0	Õ	Ö	0	0	0	0	0
Kuwait	8,461	0	Ö	Ő	Ö	0	Ö	0	Ö	0
Saudi Arabia	45,499	Ö	Ö	106	466	Ő	23	0	0	Ő
Other OPEC	65,598	738	1,888	1,866	2,166	406	1,423	1,438	0	0
Indonesia	1,279	0	549	0	0	0	0	0	0	0
Nigeria	22,503	0	0	0	0	0	0	304	0	0
Venezuela	41,816	738	1,339	1,866	2,166	406	1,423	1,134	0	0
Non OPEC	141,488	3,269	4,684	2,474	7,330	1,753	3,930	4,638	1	206
Angola	13,073	0	0	0	0	0	0	0	0	0
Argentina	2,277	0	233	0	0	0	0	0	0	0
Australia	646	0	0	0	0	0	0	0	0	0
Belgium	0	0	759	0	9	0	0	0	0	0
Brazil	0	0	0	287	595	0	0	0	0	0
Brunei	410	0	0	0	0	0	0	0	0	0
Cameroon	0	0	0	0	0	0	0	409	0	0
Canada	38,691	2,606	319	0	1,870	310	1,655	1,338	1	136
China, People's Republic of	1,762	0	0	0	0	0	0	0	0	0
Colombia	11,060	0	0	0	0	104	0	0	0	0
Congo (Brazzaville)	1,914	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) ^d	813	0	0	0	0	0	0	0	0	0
Ecuador	4,887	0	0	0	0	0	0	0	0	0
Egypt	695	0	0	0	0	0	0	0	0	0
France	0	0	43	111	326	0	0	0	0	0
Gabon	3,655	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	0	1	0	0	729	0	0
Guatemala	895	0	0	0	0	0	0	0	0	0
Italy	0	0	0	71	233	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	505	0	0	0	70
Malaysia	119	0	230	0	0	0	0	0	0	0
Mexico	35,297	0	0	0	0	0	0	0	0	0
Netherlands	0	0	192	121	31	0	0	0	0	0
Netherlands Antilles	0	0	901	0	0	181	0	188	0	0
Norway	8,064	663	138	0	27	0	0	0	0	0
Peru	1,084	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	544	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Russia	0	Ō	0	0	4	Ō	0	Ō	0	Ō
Singapore	117	0	172	0	0	0	0	0	0	0
Spain	0	0	0	0	6	0	0	0	0	0
Sweden	0	0	0	0	2	0	0	0	0	0
Trinidad and Tobago	1,631	0	0	0	0	0	275	35	0	0
United Kingdom	9,132	0	283	1,676	31	0	0	390	0	0
Virgin Islands	0	Ō	570	208	3,610	653	2,000	1,549	0	Ō
Yemen	956	Ō	0	0	0	0	0	0	0	Ō
Other	4,310	0	844	0	41	0	0	0	0	0
Total	283,435	6,074	7,073	4,446	9,962	2,159	5,376	7,094	1	206
Persian Gulf ^e	76,053	0	0	106	466	0	23	0	0	0

See footnotes at end of table.

Table 35. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, a August 1998 (Continued)

	Nambaha 6	Other Oile (Total		Daily Average	е
Country of Origin	Naphtha for	Other Oils for					Total			
Country of Origin	Petrochemical	Petrochemical					Crude Oil			
	Feedstock	Feedstock		Asphalt and	Other	Total	and	Crude		
	Use	Use	Lubricants	Road Oil	Products ^c	Products	Products	Oil	Products	Total
Arab OPEC	0	3,053	0	0	1,656	8,890	85,239	2,463	287	2,750
Algeria		3.053	0	0	1,252	7,891	8,187	10	255	264
Iraq		0	0	0	0	0	22,093	713	0	713
Kuwait		0	0	0	0	0	8,461	273	Õ	273
Saudi Arabia	-	Ö	0	0	404	999	46,498	1,468	32	1,500
Other OPEC	363	0	0	694	226	11,208	76,806	2,116	362	2,478
Indonesia		0	0	0	0	549	1,828	41	18	59
		0	0	0	0	304	22,807	726	10	736
Nigeria	-	0	0	694	226	10,355	52,171	1,349	334	1,683
Venezuela	303	U	U	094	220	10,333	52,171	1,349	334	1,003
Non OPEC		902	300	344	823	32,174	173,662	4,564	1,038	5,602
Angola		0	0	0	0	0	13,073	422	0	422
Argentina		0	0	0	0	233	2,510	73	8	81
Australia		658	0	0	0	658	1,304	21	21	42
Belgium		0	0	0	0	768	768	0	25	25
Brazil		0	0	0	0	882	882	0	28	28
Brunei		0	0	0	0	0	410	13	0	13
Cameroon		0	0	0	0	409	409	0	13	13
Canada		0	61	229	663	9,499	48,190	1,248	306	1,555
China, People's Republic of		0	0	0	0	0	1,762	57	0	57
Colombia		0	0	0	0	104	11,164	357	3	360
Congo (Brazzaville) Congo (Kinshasa) ^d	. 0	0	0	0	0	0	1,914	62	0	62
Congo (Kinshasa) ^d	. 0	0	0	0	0	0	813	26	0	26
Ecuador		0	0	0	0	0	4,887	158	0	158
Egypt	. 0	0	0	0	0	0	695	22	0	22
France	294	0	11	0	0	785	785	0	25	25
Gabon		0	0	0	0	0	3,655	118	0	118
Germany, FR	. 0	0	0	0	5	735	735	0	24	24
Guatemala		0	0	0	0	0	895	29	0	29
Italy	. 0	0	0	0	0	304	304	0	10	10
Japan	4	0	0	0	8	12	12	0	(s)	(s)
Korea, Republic of		0	0	0	86	685	685	0	22	22
Malaysia		0	0	0	0	230	349	4	7	11
Mexico	323	0	0	115	5	443	35,740	1,139	14	1,153
Netherlands		0	0	0	0	344	344	0	11	11
Netherlands Antilles		Ö	Ö	Ö	Ö	1,270	1,270	Ő	41	41
Norway		0	0	0	0	828	8.892	260	27	287
Peru	-	0	Õ	0	0	0	1.084	35	0	35
Portugal	-	0	0	0	0	544	544	0	18	18
Puerto Rico	-	Ö	228	Ö	Ö	698	698	0	23	23
Russia		0	0	0	0	4	4	0	(s)	(s)
Singapore		0	Ö	0	0	172	289	4	6	9
Spain		244	0	0	0	250	250	0	8	8
Sweden	-	0	0	0	0	2	2	0	(s)	(s)
Trinidad and Tobago	-	0	0	0	0	310	1,941	53	10	63
United Kingdom		0	0	0	0	2,380	11,512	295	77	371
Virgin Islands	-	0	0	0	47	8,637	8.637	295	279	279
Yemen		0	0	0	0	0,037	956	31	0	31
Other	-	0	0	0	9	988	5,298	139	32	171
Total		3,955	300	1,038	2,705	52,272	335,707	9,143	1,686	10,829
	•	,		•			-	•	•	,
Persian Gulf ^e	. 0	0	0	0	404	999	77,052	2,453	32	2,486

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry. b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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Table 36. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin, a August 1998

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	4.352	0	0	106	466	0	23	1.018	0	0
Algeria	,	0	0	0	0	0	0	1,018	0	0
Saudi Arabia		Ö	Ö	106	466	Ö	23	0	Ö	Ö
Other OPEC	13,501	0	0	1.866	1.929	406	1.423	1.438	0	0
Nigeria	- ,	0	0	0	0	0	0	304	Ö	Ō
Venezuela	,	0	0	1,866	1,929	406	1,423	1,134	0	0
Non OPEC	27,663	758	811	2,353	7,233	1.245	3.612	4,563	1	102
Angola		0	0	0	0	0	0	0	0	0
Argentina		0	0	0	0	0	0	0	0	0
Belgium		0	0	0	9	0	Ō	Ō	Ō	0
Brazil		0	0	287	595	0	0	0	0	0
Cameroon		0	0	0	0	0	0	409	0	0
Canada		95	0	0	1,773	307	1,337	1,263	1	102
China, People's Republic of		0	0	0	0	0	0	0	0	0
Colombia		0	0	0	0	104	0	0	0	0
Congo (Brazzaville)		0	0	0	Ö	0	Ō	Ō	Ö	0
Congo (Kinshasa) d		0	0	0	0	0	0	0	0	0
Ecuador		0	0	0	0	0	0	0	0	0
Egypt		0	0	0	0	0	0	0	0	0
France		0	0	111	326	0	0	0	0	0
Gabon	1.449	0	0	0	0	0	0	0	0	0
Germany, FR		0	0	0	1	0	0	729	0	0
Italy		0	0	71	233	0	0	0	0	0
Japan		0	0	0	0	0	0	0	0	0
Mexico		0	0	0	0	0	0	0	0	0
Netherlands	,	0	0	0	31	0	Ō	Ō	Ō	Ō
Netherlands Antilles	0	0	241	0	0	181	0	188	0	0
Norway		663	0	0	27	0	Ō	0	Ö	0
Portugal		0	0	0	544	0	0	0	0	0
Puerto Rico		0	0	0	0	0	0	0	0	0
Russia	0	0	0	0	4	0	0	0	0	0
Spain		0	0	0	6	0	0	0	0	0
Sweden		Ö	Ö	Ö	2	Ö	Ö	Ö	Ö	Ö
Trinidad and Tobago		0	0	Ō	0	0	275	35	Ō	0
United Kingdom	620	0	0	1,676	31	0	0	390	0	0
Virgin Islands		0	570	208	3,610	653	2,000	1,549	0	0
Other		0	0	0	41	0	0	0	0	0
Total	45,516	758	811	4,325	9,628	1,651	5,058	7,019	1	102
Persian Gulf ^e	4,352	0	0	106	466	0	23	0	0	0

See footnotes at end of table.

Table 36. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin, a August 1998 (Continued)

									Daily Average	9
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Arab OPEC	0	0	0	0	0	1.613	5,965	140	52	192
		0	0	0	0	1.018	1.018	0	33	33
AlgeriaSaudi Arabia	-	0	0	0	0	595	4,947	140	19	160
Other OPEC	. 0	0	0	694	0	7,756	21.257	436	250	686
Nigeria		0	0	0	0	304	8,117	252	10	262
Venezuela		0	0	694	0	7,452	13,140	183	240	424
Non OPEC	301	0	263	316	71	21,629	49,292	892	698	1,590
Angola	. 0	0	0	0	0	0	7,324	236	0	236
Argentina	. 0	0	0	0	0	0	781	25	0	25
Belgium	. 0	0	0	0	0	9	9	0	(s)	(s)
Brazil	. 0	0	0	0	0	882	882	0	28	28
Cameroon	. 0	0	0	0	0	409	409	0	13	13
Canada	. 5	0	35	201	9	5,128	9,772	150	165	315
China, People's Republic of	. 0	0	0	0	0	0	638	21	0	21
Colombia		0	0	0	0	104	2,309	71	3	74
Congo (Brazzaville)	. 0	0	0	0	0	0	517	17	0	17
Congo (Brazzaville) Congo (Kinshasa)	. 0	0	0	0	0	0	813	26	0	26
Ecuador		0	0	0	0	0	1.418	46	0	46
Egypt		0	0	0	0	0	695	22	0	22
France	. 0	0	0	0	0	437	437	0	14	14
Gabon	. 0	0	0	0	0	0	1,449	47	0	47
Germany, FR		0	0	0	5	735	735	0	24	24
Italy		0	0	0	0	304	304	0	10	10
Japan		Ō	Ō	0	3	3	3	0	(s)	(s)
Mexico		0	0	115	0	115	1,387	41	4	45
Netherlands		0	0	0	0	31	31	0	1	1
Netherlands Antilles		Ō	Ō	Ō	Ō	610	610	Ö	20	20
Norway		0	0	0	0	690	5,475	154	22	177
Portugal		0	0	0	0	544	544	0	18	18
Puerto Rico		0	228	0	0	524	524	0	17	17
Russia		0	0	Ö	Ö	4	4	Ö	(s)	(s)
Spain	-	0	0	0	0	6	6	0	(s)	(s)
Sweden	-	Ö	Ö	Ö	Ő	2	2	Ö	(s)	(s)
Trinidad and Tobago		0	Ö	Ö	Ö	310	812	16	10	26
United Kingdom		0	0	0	0	2,097	2.717	20	68	88
Virgin Islands	-	0	0	0	47	8,637	8.637	0	279	279
Other	-	Ö	Ő	Ő	7	48	48	Ö	2	2
Total	301	0	263	1,010	71	30,998	76,514	1,468	1,000	2,468
Persian Gulf ^e	0	0	0	0	0	595	4,947	140	19	160

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

d Formerly Zaire.

e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Table 37. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin, a August 1998

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	9,511	0	0	0	0	0	0	0	0	0
Iraq	3,598	0	0	0	0	0	0	0	0	0
Kuwait	866	0	0	0	0	0	0	0	0	0
Saudi Arabia	5,047	0	0	0	0	0	0	0	0	0
Other OPEC	6,368	0	0	0	0	0	0	0	0	0
Nigeria	2,815	0	0	0	0	0	0	0	0	0
Venezuela	3,553	0	0	0	0	0	0	0	0	0
Non OPEC	34,554	1,838	1	0	64	0	99	75	0	34
Angola	2,342	0	0	0	0	0	0	0	0	0
Canada	26,704	1,838	1	0	64	0	99	75	0	34
Colombia	3,461	0	0	0	0	0	0	0	0	0
Gabon	310	0	0	0	0	0	0	0	0	0
Mexico	550	0	0	0	0	0	0	0	0	0
United Kingdom	1,187	0	0	0	0	0	0	0	0	0
Total	50,433	1,838	1	0	64	0	99	75	0	34
Persian Gulf ^e	9,511	0	0	0	0	0	0	0	0	0

Table 37. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,^a August 1998 (Continued)

									Daily Averag	е
Country of Origin	Naphtha for Petrochemical Feedstock	Feedstock		Asphalt and	_	Total	Total Crude Oil and	Crude		
	Use	Use	Lubricants	Road Oil	Products ^c	Products	Products	Oil	Products	Total
Arab OPEC	0	0	0	0	0	0	9,511	307	0	307
Iraq		0	0	0	0	0	3,598	116	0	116
Kuwait	0	0	0	0	0	0	866	28	0	28
Saudi Arabia	0	0	0	0	0	0	5,047	163	0	163
Other OPEC	0	0	0	0	0	0	6,368	205	0	205
Nigeria		0	0	0	0	0	2,815	91	0	91
Venezuela		0	0	0	0	0	3,553	115	0	115
Non OPEC	35	0	26	14	41	2,227	36,781	1,115	72	1,186
Angola		0	0	0	0	´ 0	2,342	76	0	76
Canada		0	26	14	41	2,227	28,931	861	72	933
Colombia		0	0	0	0	0	3,461	112	0	112
Gabon		0	0	0	0	0	310	10	0	10
Mexico		0	0	0	0	0	550	18	0	18
United Kingdom		0	0	0	0	0	1,187	38	0	38
Total	35	0	26	14	41	2,227	52,660	1,627	72	1,699
Persian Gulf ^e	0	0	0	0	0	0	9,511	307	0	307

^a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry. b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

d Formerly Zaire.
e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.
(s) = Less than 500 barrels per day.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 38. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin, August 1998

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	57,576	2,067	501	0	0	0	0	0	0	0
Algeria		2,067	501	Ö	0	0	0	0	0	0
Iraq		0	0	0	0	0	0	0	0	0
Kuwait	,	Ö	0	Ö	Õ	0	0	0	0	0
Saudi Arabia		Ö	Ö	Ö	Ö	Ō	Ö	Ö	Ö	0
Other OPEC	43,910	738	1,720	0	237	0	0	0	0	0
Indonesia	- /	0	381	0	0	0	0	0	0	0
Nigeria		0	0	0	0	0	0	0	0	0
Venezuela	,	738	1,339	Ö	237	Ö	Ō	Ö	Ö	Ö
Non OPEC	62,554	543	3,483	121	0	0	0	0	0	70
Angola		0	0	0	0	0	0	0	0	0
Argentina		0	233	0	0	0	0	0	0	0
Australia	. 0	0	0	0	0	0	0	0	0	0
Belgium		0	759	0	0	0	0	0	0	0
Brunei		0	0	0	0	0	0	0	0	0
Canada		543	318	0	0	0	0	0	0	0
Colombia		0	0	0	0	0	0	0	0	0
Congo (Brazzaville)		0	0	0	0	0	0	0	0	0
Ecuador		0	0	0	0	0	0	0	0	0
France		0	43	0	0	0	0	0	0	0
Gabon		0	0	0	0	0	0	0	0	0
Guatemala		0	Õ	0	0	0	0	Ô	0	Ô
Japan		0	Õ	Õ	0	0	0	Ô	0	0
Korea, Republic of		0	0	0	0	0	0	0	0	70
Mexico		0	0	0	0	0	0	0	0	0
Netherlands		0	192	121	0	0	0	0	0	0
Netherlands Antilles		0	660	0	0	0	0	0	0	0
Norway	3,279	0	138	0	0	0	0	0	0	0
Peru		0	0	0	0	0	0	0	0	0
Puerto Rico		0	0	0	0	0	0	0	0	0
Singapore		Ö	13	Ö	Õ	Ö	Ö	Ö	Ö	Ö
Spain		Ö	0	Ö	Õ	Ö	Ö	Ö	Ö	Õ
Trinidad and Tobago		Ö	Ö	Ö	Õ	Ö	Ö	Ö	Ö	Ö
United Kingdom		0	283	0	0	0	Ö	0	0	0
Yemen	,	Ö	0	Ö	Õ	Ö	Ö	Ö	Ö	Õ
Other		0	844	0	0	0	0	0	0	0
Total	164,040	3,348	5,704	121	237	0	0	0	0	70
Persian Gulf ^e	57,280	0	0	0	0	0	0	0	0	0

Table 38. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin, a August 1998 (Continued)

									Daily Average	•
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Arab OPEC	. 0	3,053	0	0	1,252	6,873	64,449	1,857	222	2,079
Algeria		3,053	0	0	1,252	6,873	7,169	10	222	231
Iraq		0	0	0	0	0	15.696	506	0	506
Kuwait		Ö	0	0	Ö	0	6,701	216	Ō	216
Saudi Arabia		0	0	0	0	0	34,883	1,125	0	1,125
Other OPEC	. 363	0	0	0	0	3,058	46,968	1,416	99	1,515
Indonesia		0	0	0	0	381	714	11	12	23
Nigeria		Ö	Õ	Ö	Ö	0	11,875	383	0	383
Venezuela		0	0	0	0	2,677	34,379	1,023	86	1,109
Non OPEC	. 1,160	902	11	0	7	6,297	68,851	2,018	203	2,221
Angola	. 0	0	0	0	0	0	3,407	110	0	110
Argentina	. 0	0	0	0	0	233	947	23	8	31
Australia	. 0	658	0	0	0	658	658	0	21	21
Belgium		0	0	0	0	759	759	0	24	24
Brunei		0	0	0	0	0	410	13	0	13
Canada	. 271	0	0	0	0	1,132	1.132	0	37	37
Colombia		0	0	0	0	0	5,394	174	0	174
Congo (Brazzaville)		0	0	0	0	0	1.397	45	0	45
Ecuador		0	0	0	Ö	Ö	691	22	0	22
France		0	11	0	0	348	348	0	11	11
Gabon		0	0	0	0	0	1.896	61	0	61
Guatemala		0	0	0	Ö	Ö	895	29	0	29
Japan		0	0	0	5	9	9	0	(s)	(s)
Korea, Republic of		0	0	0	0	70	70	0	2	2
Mexico	. •	0	0	0	0	323	33.013	1.055	10	1.065
Netherlands		0	0	0	0	313	313	0	10	1,003
Netherlands Antilles		0	0	0	0	660	660	0	21	21
Norway		0	0	0	0	138	3.417	106	4	110
Peru	. •	0	0	0	0	0	346	11	0	110
		0	0	0	0	174	174	0	6	6
Puerto Rico		0	0	0	0	174	174	4	(s)	0
Singapore		244	0	0	0	244	244	0	(S) 8	8
Spain			-	-				-		_
Trinidad and Tobago		0	0	0	0	0	1,129	36	0	36
United Kingdom		•	0	0	0	283	7,608	236	9	245
Yemen Other		0 0	0	0	0 2	0 940	956 2,848	31 62	0 30	31 92
Total		3,955	11	0	1,259	16,228	180,268	5,292	523	5,815
Persian Gulf ^e	. 0	0	0	0	0	0	57,280	1,848	0	1,848

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
 b Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and by Samuel Saviation gasonine, direction gasonine, and station gasonine gasonine gasonine, and station gasonine, direction gasonine, and gasonine gasonine, and gasonine gasonine, direction gasonine, direc

Table 39. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin, August 1998

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
_					PAD Dis	strict IV				
Non OPEC	,	126 126	0 0	0 0	18 18	0 0	204 204	0 0	0 0	0 0
Total	4,429	126	0	0	18	0	204	0	0	0

_										
					PAD Di	strict V				
Arab OPEC	4,910	0	0	0	0	0	0	0	0	0
Iraq	2,799	0	0	0	0	0	0	0	0	0
Kuwait	894	0	0	0	0	0	0	0	0	0
Saudi Arabia	1,217	0	0	0	0	0	0	0	0	0
Other OPEC	1,819	0	168	0	0	0	0	0	0	0
Indonesia	946	0	168	0	0	0	0	0	0	0
Venezuela	873	0	0	0	0	0	0	0	0	0
Non OPEC	12,288	4	389	0	15	508	15	0	0	0
Argentina	782	0	0	0	0	0	0	0	0	0
Australia	646	0	0	0	0	0	0	0	0	0
Canada	2,914	4	0	0	15	3	15	0	0	0
China, People's Republic of	1,124	0	0	0	0	0	0	0	0	0
Ecuador	2,778	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	505	0	0	0	0
Malaysia	119	0	230	0	0	0	0	0	0	0
Mexico	785	0	0	0	0	0	0	0	0	0
Peru	738	0	0	0	0	0	0	0	0	0
Singapore	0	0	159	0	0	0	0	0	0	0
Other	2,402	0	0	0	0	0	0	0	0	0
Total	19,017	4	557	0	15	508	15	0	0	0
Persian Gulf ^e	4,910	0	0	0	0	0	0	0	0	0

Table 39. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin, a August 1998 (Continued)

									Daily Average)
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
				Р	AD District	IV				
on OPEC		0	0	6	193	547	4,976	143	18	161
Canada	U	0	0	6	193	547	4,976	143	18	161

					PAD Distric	et V				
Arab OPEC	0	0	0	0	404	404	5,314	158	13	171
Iraq	0	0	0	0	0	0	2,799	90	0	90
Kuwait	0	Ô	Ô	Ô	0	0	894	29	0	29
Saudi Arabia	0	0	0	0	404	404	1,621	39	13	52
Other OPEC	0	0	0	0	226	394	2,213	59	13	71
Indonesia	0	0	0	0	0	168	1,114	31	5	36
Venezuela	0	0	0	0	226	226	1,099	28	7	35
Non OPEC	24	0	0	8	511	1,474	13,762	396	48	444
Argentina	0	0	0	0	0	0	782	25	0	25
Australia	0	0	0	0	0	0	646	21	0	21
Canada	0	0	0	8	420	465	3,379	94	15	109
China, People's Republic of	0	0	0	0	0	0	1,124	36	0	36
Ecuador	0	0	0	0	0	0	2,778	90	0	90
Korea, Republic of	24	0	0	0	86	615	615	0	20	20
Malaysia	0	0	0	0	0	230	349	4	7	11
Mexico	0	0	0	0	5	5	790	25	(s)	25
Peru	0	0	0	0	0	0	738	24	0	24
Singapore	0	0	0	0	0	159	159	0	5	5
Other	0	0	0	0	0	0	2,402	77	0	77
Total	24	0	0	8	1,141	2,272	21,289	613	73	687
Persian Gulf ^e	0	0	0	0	404	404	5,314	158	13	171

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

b Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

d Formerly Zaire.

e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,^a January-August 1998 (Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	476,085	17,392	13,486	1,114	5,345	0	247	9,819	0	0
Algeria		16,244	6,036	1,008	0	0	0	8,450	0	0
Iraq		0	0	0	0	0	0	0	0	0
Kuwait		0	0	0	0	0	0	0	0	0
Qatar		0	0	0	0	0	0	0	0	0
Saudi Arabia	,	1,148	7,450	106	5,345	0	247	1,369	0	0
United Arab Emirates	995	0	0	0	0	0	0	0	0	0
Other OPEC	523,526	3,471	18,375	8,466	11,932	7,281	10,275	11,035	5	50
Indonesia		0	649	0	0	0	0	999	0	0
Nigeria		0	0	71	64	0	0	897	0	50
Venezuela	332,809	3,471	17,726	8,395	11,868	7,281	10,275	9,139	5	0
Non OPEC		32,639	31,749	37,668	55,307	11,072	36,145	29,588	201	1,635
Angola		0	0	0	0	0	0	0	0	260
Argentina		0	233	2,890	496	0	0	0	0	0
Australia		0	104	0	0	0	0	0	0	0
Bahama Islands		0	0	0	0	0	0	81	0	0
Belgium		0	4,195	2,214	855	0	0	738	0	0
Brazil		0	0	2,540	1,531	0	0	819	0	0
Brunei	,	0	0	0	0	0	0	0	0	0
Cameroon		0	0	0	0	0	0	618	0	0
Canada		28,691	2,063	1,062	13,715	374	14,325	5,380	201	1,305
China, People's Republic of		0	0	0	0	0	0	0	0	0
Colombia	,	0	0	218	0	104	0	270	0	0
Congo (Brazzaville)		0	0	0	0	0	0	0	0	0
Congo (Kinshasa) d		0	0	0	0	0	0	0	0	0
Denmark		0	0	0	221	0	0	0	0	0
Ecuador		0	0 0	407	0	0	0	201	0	0
Egypt				58	-	0	0	0	0	0
France		0	1,435 0	3,584 0	2,714 0	0	0	0	0	0
Gabon		0	294	639	165	0	0		0	0
Germany, FRGreece		0	294	039	0	0	0	2,288 0	0	0
Guatemala		0	0	0	0	0	0	0	0	0
Ireland	,	0	0	71	0	0	0	0	0	0
Italy		0	140	1,855	1,027	0	0	490	0	0
Japan		0	40	219	0	0	130	0	0	0
Korea, Republic of		0	0	311	0	1,318	134	147	0	70
Malaysia	-	0	2,172	0	0	0	0	0	0	0
Mexico		0	692	99	0	116	0	0	0	0
Netherlands		0	633	1,805	716	0	0	513	0	0
Netherlands Antilles		0	8,308	54	0	3,114	0	2,412	0	0
New Zealand	,	Ö	0,000	0	0	0	0	0	0	0
Norway		2,101	352	0	611	0	0	0	0	0
Oman	,	0	512	0	0	0	0	Õ	0	0
Peru		0	0	Ö	0	0	0	203	0	Ö
Portugal		0	0	0	2,652	0	0	0	0	0
Puerto Rico		Ö	Ō	Ö	0	Ö	Ō	Ō	Ö	0
Romania		Ö	Ō	685	Ō	Ö	208	Ō	Ö	0
Russia		0	94	0	366	0	0	0	0	0
Singapore	,	0	2,546	0	109	597	0	49	0	0
Spain		0	280	1,359	904	0	0	582	0	0
Sweden		0	0	233	2	Ō	0	0	0	0
Trinidad and Tobago		0	0	359	699	0	275	295	0	0
Tunisia		0	0	0	0	0	0	0	0	0
Turkey		0	144	0	0	0	0	0	0	0
United Kingdom		1,847	283	12,045	1,223	0	0	2,183	0	0
Virgin Islands	. 0	0	5,271	2,285	26,900	5,449	21,073	12,158	0	0
Yemen		0	0	0	0	0	0	0	0	0
Other	8,611	0	1,958	2,676	401	0	0	161	0	0
Total	2,086,102	53,502	63,610	47,248	72,584	18,353	46,667	50,442	206	1,685
Persian Gulf ^e	472,693	1,148	7,976	106	5,345	0	247	1,369	0	0

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,^a January-August 1998 (Continued)

									Daily Average	•
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Arab OPEC	1,488	33,871	0	0	10,950	93,712	569,797	1,959	386	2,345
Algeria	812	32,944	0	0	5,294	70,788	74,180	14	291	305
Iraq	0	0	0	0	0	0	55,082	227	0	227
Kuwait	0	0	0	0	0	0	73,910	304	0	304
Qatar	0	927	0	0	0	927	1,431	2	4	6
Saudi Arabia	676	0	0	0	5,656	21,997	364,199	1,408	91	1,499
United Arab Emirates	0	0	0	0	0	0	995	4	0	4
Other OPEC	2,402	370	0	3,591	1,793	79,046	602,572	2,154	325	2,480
Indonesia	0	0	0	0	0	1,648	10,134	35	7	42
Nigeria	105	0	0	0	0	1,187	183,418	750	5	755
Venezuela	2,297	370	0	3,591	1,793	76,211	409,020	1,370	314	1,683
Non OPEC	11,151	7,791	2,281	2,761	8,854	268,842	1,355,333	4,471	1,106	5,578
Angola	0	0	0	0	0	260	105,539	433	1	434
Argentina	633	0	0	0	0	4,252	21,886	73	17	90
Australia	300	4,994	0	0	0	5,398	13,082	32	22	54
Bahama Islands	0	0	0	0	0	81	81	0	(s)	(s)
Belgium	18	176	0	0	0	8,196	8,196	0	34	34
Brazil	219	0	0	0	232	5,341	5,341	0	22	22
Brunei	0	155	0	0	0	155	2,787	11	1	11
Cameroon	0	0	0	0	Ö	618	618	0	3	3
Canada	1,167	Ö	543	1,726	5,380	75,932	390.697	1,295	312	1,608
China, People's Republic of	0	0	0	0	0	0	13,933	57	0	57
Colombia	202	0	0	0	0	794	74,686	304	3	307
Congo (Prozzovillo)	0	0	0	0	0		,		0	
Congo (Brazzaville)			-			0	10,553	43		43
Congo (Kinshasa) d	0	0	0	0	0	0	5,217	21	0	21
Denmark	0	0	0	0	0	221	221	0	1	1
Ecuador		0	0	0	0	706	23,654	94	3	97
Egypt	70	0	0	0	0	128	2,887	11	1	12
France		0	47	0	890	9,498	9,498	0	39	39
Gabon	0	0	0	0	0	0	51,462	212	0	212
Germany, FR	231	0	0	0	62	3,679	3,679	0	15	15
Greece	311	0	0	0	0	311	311	0	1	1
Guatemala	0	0	0	0	0	0	5,946	24	0	24
Ireland	0	0	0	0	0	71	71	0	(s)	(s)
Italy	75	0	0	0	0	3,587	3,587	0	15	15
Japan	32	0	0	0	54	475	475	0	2	2
Korea, Republic of	99	0	0	0	399	2,478	2,478	0	10	10
Malaysia		0	Ö	0	0	2,172	7,614	22	9	31
Mexico		632	0	1,035	18	5,163	325,731	1,319	21	1,340
Netherlands	715	0	0	0	986	5,368	5,368	0	22	22
Netherlands Antilles	97	1,067	0	0	0	15,052	16,052	4	62	66
	0	0	0	0	0	15,052	509	2	0	2
New Zealand	0	350	0	0	0			226	14	240
Norway	0	350	0	0		3,414	58,266			
Oman	-	-	-	-	0	512	512	0	2	2
Peru	0	0	0	0	0	203	10,417	42	1	43
Portugal	0	0	0	0	0	2,652	2,652	0	11	11
Puerto Rico	2,024	0	1,691	0	0	3,715	3,715	0	15	15
Romania	0	0	0	0	0	893	893	0	4	. 4
Russia	0	0	0	0	0	460	3,607	13	2	15
Singapore		0	0	0	208	3,509	3,626	(s)	14	15
Spain	273	244	0	0	0	3,642	3,642	0	15	15
Sweden		0	0	0	0	235	235	0	1	1
Trinidad and Tobago	0	0	0	0	0	1,628	14,757	54	7	61
Tunisia	222	0	0	0	0	222	222	0	1	1
Turkey	288	173	0	0	0	605	605	0	2	2
United Kingdom		0	0	0	0	17,581	50,151	134	72	206
Virgin Islands	46	0	Ö	0	571	73,753	73,753	0	304	304
Yemen	0	Ö	Õ	Ö	0	0	1,628	7	0	7
Other	632	0	Ő	Ő	54	5,882	14,493	35	24	60
Total	15,041	42,032	2,281	6,352	21,597	441,600	2,527,702	8,585	1,817	10,402
Persian Gulf ^e	676	927	0	0	5,656	23,450	496,143	1,945	97	2,042

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

d Formerly Zaire.

e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

⁽s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 41. PAD District I—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,^a January-August 1998 (Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	38,251	2,830	0	1,114	5,325	0	247	9,376	0	0
Algeria	,	2.830	0	1,008	0	0	0	8.450	0	0
Saudi Arabia		0	0	106	5,325	0	247	926	0	0
Other OPEC	128,762	0	280	8,259	11,644	7,281	10,275	9,886	5	0
Nigeria		0	0	[^] 71	13	0	0	897	0	0
Venezuela	50,508	0	280	8,188	11,631	7,281	10,275	8,989	5	0
Non OPEC	209,821	3,103	6,529	35,197	51,654	9,439	33,643	27,881	201	781
Angola		0	0	0	0	0	0	0	0	0
Argentina	,	0	0	2,890	496	0	0	0	0	0
Belgium		0	0	2,188	855	0	0	738	0	0
Brazil		0	0	2,504	1,531	Ō	0	819	0	Ō
Brunei		0	0	0	0	0	0	0	0	0
Cameroon		0	0	0	0	0	0	618	0	0
Canada		1.752	578	1.056	12,298	358	12,087	5,133	201	781
China, People's Republic of		0	0	0	0	0	0	0,100	0	0
Colombia	,	0	0	0	0	104	Ö	270	0	0
Congo (Brazzaville)		0	0	0	0	0	0	0	0	0
Congo (Kinshasa) d		0	0	0	0	0	0	0	0	0
Denmark		0	0	0	221	0	0	0	0	0
		0	0	0	0	0	0	-	0	0
Ecuador		0	0	-	0	0	0	201	0	0
Egypt		0	-	0	-	0	0	0	0	0
France		-	272	3,578	2,700	-	-	-	-	0
Gabon		0	0	0	0	0	0	0	0	•
Germany, FR		0	0	635	165	0	0	1,457	0	0
Ireland		0	0	71	0	0	0	0	0	0
Italy		0	0	1,436	1,027	0	0	490	0	0
Japan		0	0	219	0	0	0	0	0	0
Mexico	,	0	0	93	0	107	0	0	0	0
Netherlands		0	0	1,466	677	0	0	438	0	0
Netherlands Antilles		0	408	54	0	2,825	0	2,135	0	0
Norway	. 36,445	663	0	0	611	0	0	0	0	0
Peru	. 1,045	0	0	0	0	0	0	203	0	0
Portugal	. 0	0	0	0	1,027	0	0	0	0	0
Puerto Rico	. 0	0	0	0	0	0	0	0	0	0
Romania	. 0	0	0	685	0	0	208	0	0	0
Russia	. 0	0	0	0	366	0	0	0	0	0
Singapore	. 0	0	0	0	0	596	0	0	0	0
Spain	. 0	0	0	1,359	904	0	0	582	0	0
Sweden		0	0	233	2	0	0	0	0	0
Trinidad and Tobago		Ō	0	359	699	Ö	275	295	Ö	Ö
United Kingdom		688	0	12.045	1,223	Ō	0	2,183	0	0
Virgin Islands		0	5,271	2,152	26,616	5,449	21,073	12,158	Ö	Ö
Other		0	0	2,174	236	0	0	161	Ö	0
Total		5,933	6,809	44,570	68,623	16,720	44,165	47,143	206	781
	•	•	•	ŕ	ŕ	•	,	•		
Persian Gulf ^e	38,251	0	0	106	5,325	0	247	926	0	0

Table 41. PAD District I—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, a January-August 1998 (Continued)

									Daily Average	•
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Arab OPEC	0	0	0	0	456	19,348	57,599	157	80	237
Algeria		0	0	0	0	12,288	12,288	0	51	51
Saudi Arabia	0	0	0	0	456	7,060	45,311	157	29	186
Other OPEC	105	0	0	3,370	741	51,846	180,608	530	213	743
Nigeria		0	0	0	0	1,086	79,340	322	4	327
Venezuela		0	Ö	3,370	741	50,760	101,268	208	209	417
Non OPEC	1.967	0	2.046	2,571	2,857	177,869	387.690	863	732	1.595
Angola		Ö	0	0	0	0	61,310	252	0	252
Argentina		0	0	0	0	3,386	5,357	8	14	22
Belgium	-	0	0	0	0	3,781	3,781	0	16	16
	-	-	-	0	-		-, -	-		
Brazil		0	0	-	210	5,064	5,064	0	21	21
Brunei		0	0	0	0	0	122	1	0	1
Cameroon		0	0	0	0	618	618	0	3	3
Canada	252	0	355	1,536	74	36,461	59,991	97	150	247
China, People's Republic of	0	0	0	0	0	0	3,730	15	0	15
Colombia	0	0	0	0	0	374	16.094	65	2	66
Congo (Brazzaville)	0	0	0	0	0	0	3,715	15	0	15
Congo (Kinshasa) d	0	0	0	0	0	0	3,173	13	0	13
Denmark		0	0	0	0	221	221	0	1	13
		•	•	•	•			•		-
Ecuador		0	0	0	0	201	8,136	33	1	33
Egypt		0	0	0	0	0	2,759	11	0	11
France		0	0	0	880	7,430	7,430	0	31	31
Gabon	0	0	0	0	0	0	25,561	105	0	105
Germany, FR	0	0	0	0	57	2,314	2,314	0	10	10
Ireland	0	0	0	0	0	71	71	0	(s)	(s)
Italy		0	0	0	0	2.953	2,953	0	12	12
Japan	-	0	0	0	33	266	266	0	1	1
Mexico		0	0	1,035	0	1,235	8,299	29	5	34
		0					,			
Netherlands		-	0	0	986	3,567	3,567	0	15	15
Netherlands Antilles		0	0	0	0	5,422	5,422	0	22	22
Norway		0	0	0	0	1,274	37,719	150	5	155
Peru	0	0	0	0	0	203	1,248	4	1	5
Portugal	0	0	0	0	0	1,027	1,027	0	4	4
Puerto Rico		0	1,691	0	0	3,132	3,132	0	13	13
Romania	,	0	0	0	0	893	893	0	4	4
Russia		0	Ö	0	0	366	366	0	2	2
		0	0	0	0			0	2	2
Singapore	-	-		-		596	596	-		
Spain		0	0	0	0	2,845	2,845	0	12	12
Sweden		0	0	0	0	235	235	0	1	1
Trinidad and Tobago		0	0	0	0	1,628	4,626	12	7	19
United Kingdom	0	0	0	0	0	16,139	28,230	50	66	116
Virgin Islands	0	0	0	0	571	73,290	73,290	0	302	302
Other		0	0	0	46	2,877	3,529	3	12	15
Total	2,072	0	2,046	5,941	4,054	249,063	625,897	1,551	1,025	2,576
Persian Gulf ^e	0	0	0	0	456	7,060	45,311	157	29	186

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
 b Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

d Formerly Zaire.

e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates. (s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 42. PAD District II—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,^a **January-August 1998** (Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	57,657	0	0	0	0	0	0	0	0	0
Iraq	5,692	0	0	0	0	0	0	0	0	0
Kuwait	7,463	0	0	0	0	0	0	0	0	0
Qatar	504	0	0	0	0	0	0	0	0	0
Saudi Arabia	43,998	0	0	0	0	0	0	0	0	0
Other OPEC	46,937	0	0	0	0	0	0	0	0	0
Nigeria	21,627	0	0	0	0	0	0	0	0	0
Venezuela	25,310	0	0	0	0	0	0	0	0	0
Non OPEC	298,331	20,355	185	6	1,110	0	800	247	0	300
Angola	18,038	0	0	0	0	0	0	0	0	0
Argentina	241	0	0	0	0	0	0	0	0	0
Brunei	1,077	0	0	0	0	0	0	0	0	0
Canada	226,676	20,355	185	6	1,110	0	800	247	0	300
Colombia	19,958	0	0	0	0	0	0	0	0	0
Congo (Brazzaville)	401	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) ^d	701	0	0	0	0	0	0	0	0	0
Ecuador	338	0	0	0	0	0	0	0	0	0
Gabon	310	0	0	0	0	0	0	0	0	0
Mexico	22,286	0	0	0	0	0	0	0	0	0
Norway	2,699	Ó	0	0	Ō	0	0	0	0	0
Peru	303	0	0	0	0	0	0	0	0	0
United Kingdom	5,303	0	0	0	0	0	0	0	0	0
Total	402,925	20,355	185	6	1,110	0	800	247	0	300
Persian Gulf ^e	57,657	0	0	0	0	0	0	0	0	0

Table 42. PAD District II—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,^a January-August 1998 (Continued)

									Daily Average	Э
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Arab OPEC	0	0	0	0	0	0	57,657	237	0	237
Iraq		0	0	0	0	0	5.692	23	0	23
Kuwait		0	0	0	0	0	7.463	31	0	31
Qatar		0	0	0	0	0	504	2	0	2
Saudi Arabia		0	0	Ō	0	0	43,998	181	Ö	181
Other OPEC	0	0	0	0	0	0	46,937	193	0	193
Nigeria	0	0	0	0	0	0	21,627	89	0	89
Venezuela		0	0	0	0	0	25,310	104	0	104
Non OPEC	274	0	188	115	368	23,948	322,279	1,228	99	1,326
Angola	0	0	0	0	0	0	18,038	74	0	74
Argentina	0	0	0	0	0	0	241	1	0	1
Brunei	0	0	0	0	0	0	1,077	4	0	4
Canada	274	0	188	115	368	23,948	250,624	933	99	1,031
Colombia	0	0	0	0	0	0	19,958	82	0	82
Congo (Brazzaville)	0	0	0	0	0	0	401	2	0	2
Congo (Kinshasa) d	0	0	0	0	0	0	701	3	0	3
Ecuador		0	0	0	0	0	338	1	0	1
Gabon	0	0	0	0	0	0	310	1	0	1
Mexico	0	0	0	0	0	0	22,286	92	0	92
Norway	0	0	0	0	0	0	2,699	11	0	11
Peru	0	0	0	0	0	0	303	1	0	1
United Kingdom	0	0	0	0	0	0	5,303	22	0	22
Total	274	0	188	115	368	23,948	426,873	1,658	99	1,757
Persian Gulf ^e	0	0	0	0	0	0	57,657	237	0	237

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

() Loss than 500 barrels per day.

Table 43. PAD District III—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, a January-August 1998

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	. 349,724	14,562	13,486	0	0	0	0	443	0	0
Algeria		13,414	6,036	0	0	0	0	0	0	0
Iraq		0	0	Ö	Ö	0	0	0	0	0
Kuwait		Ö	0	0	0	0	0	0	Ô	0
Qatar		0	0	0	0	0	0	0	0	0
Saudi Arabia		1,148	7,450	0	0	0	0	443	0	0
United Arab Emirates	- , -	0	7,430	0	0	0	0	0	0	0
Other OPEC	. 336,106	3,471	17,464	207	237	0	0	150	0	50
Indonesia		0	381	0	0	0	0	0	0	0
Nigeria		0	0	0	0	0	0	0	0	50
•	,					0	0	150	0	0
Venezuela	. 253,743	3,471	17,083	207	237	U	U	150	U	U
Non OPEC		7,588	20,183	1,360	1,625	9	0	1,264	0	551
Angola		0	0	0	0	0	0	0	0	260
Argentina		0	233	0	0	0	0	0	0	0
Australia		0	104	0	0	0	0	0	0	0
Bahama Islands	. 0	0	0	0	0	0	0	81	0	0
Belgium	. 0	0	4,195	0	0	0	0	0	0	0
Brazil	. 0	0	0	36	0	0	0	0	0	0
Brunei	. 1,433	0	0	0	0	0	0	0	0	0
Canada		4,991	1,193	0	0	0	0	0	0	221
China, People's Republic of		0	0	0	0	0	0	0	0	0
Colombia		Ö	Ö	218	Ö	0	0	0	0	0
Congo (Brazzaville)		0	0	0	0	0	0	0	0	0
Congo (Kinshasa) d		0	0	0	0	0	0	0	Ö	0
Ecuador		0	0	227	0	0	0	0	0	0
		0	0		0	0	0	0	0	0
Egypt		0	-	58 0	0	0	0	-	0	0
France			1,163			0	0	0	0	0
Gabon		0	0	0	0	-	-	0	-	-
Germany, FR		0	294	0	0	0	0	831	0	0
Greece		0	0	0	0	0	0	0	0	0
Guatemala		0	0	0	0	0	0	0	0	0
Italy		0	140	419	0	0	0	0	0	0
Japan		0	0	0	0	0	0	0	0	0
Korea, Republic of	. 0	0	0	0	0	0	0	0	0	70
Malaysia	. 3,111	0	0	0	0	0	0	0	0	0
Mexico	. 285,688	0	692	6	0	9	0	0	0	0
Netherlands	. 0	0	633	263	0	0	0	75	0	0
Netherlands Antilles		0	7,900	0	0	0	0	277	0	0
Norway	. 15,708	1,438	352	0	0	0	0	0	0	0
Oman		0	512	0	0	0	0	0	0	0
Peru		0	0	0	0	0	0	0	0	0
Portugal		0	0	0	1,625	0	0	0	0	0
Puerto Rico		0	0	0	0	0	0	0	0	0
		0	94	0	0	0	0	0	0	0
Russia	*	0		0	-	0	0	0	0	0
Singapore			13		0	•	O	0	0	U
Spain		0	280	0	0	0	0	0	Ü	0
Trinidad and Tobago	-, -	0	0	0	0	U	U	U	Ü	U
Tunisia		0	0	0	0	0	0	0	0	0
Turkey		0	144	0	0	0	0	0	0	0
United Kingdom		1,159	283	0	0	0	0	0	0	0
Virgin Islands		0	0	133	0	0	0	0	0	0
Yemen	. 1,628	0	0	0	0	0	0	0	0	0
Other	. 3,313	0	1,958	0	0	0	0	0	0	0
Total	. 1,155,358	25,621	51,133	1,567	1,862	9	0	1,857	0	601
Persian Gulf ^e	. 346,332	1,148	7,976	0	0	0	0	443	0	0

Table 43. PAD District III—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, a January-August 1998 (Continued)

									Daily Average	•
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Arch OBEC	4 400	22 074	•	0	E 204	60 144	440 060	1 420	205	1 724
Arab OPEC	1,488	33,871	0	0	5,294	69,144	418,868	1,439	285	1,724
Algeria	812	32,944	0	0	5,294	58,500	61,892	14	241	255
Iraq	0	0	0	0	0	0	36,612	151	0	151
Kuwait	0	0	0	0	0	0	56,862	234	0	234
Qatar	0	927	0	0	0	927	927	0	4	4
Saudi Arabia	676	0	0	0	0	9,717	262,179	1,039	40	1,079
United Arab Emirates	0	0	0	0	0	0	396	2	0	2
Other OPEC	2,297	370	0	221	0	24,467	360,573	1,383	101	1,484
Indonesia	0	0	0	0	0	381	714	. 1	2	[′] 3
Nigeria	0	0	Ö	0	0	50	82,080	338	(s)	338
Venezuela	2,297	370	0	221	0	24,036	277,779	1,044	99	1,143
Non OPEC	8,811	7,791	47	0	67	49,296	518,824	1,932	203	2,135
Angola	0	0	0	Ö	0	260	26,191	107	1	108
Argentina	633	Õ	Ö	0	Ő	866	11,502	44	4	47
Australia	300	4,994	0	0	Ö	5,398	5,855	2	22	24
	0	4,994	0	0	0	5,396 81	5,655 81	0		
Bahama Islands			-	-				-	(s)	(s)
Belgium	18	176	0	0	0	4,389	4,389	0	18	18
Brazil	219	0	0	0	22	277	277	0	1	1
Brunei	0	155	0	0	0	155	1,588	6	1	7
Canada	641	0	0	0	1	7,047	11,464	18	29	47
China, People's Republic of	0	0	0	0	0	0	3,430	14	0	14
Colombia	202	0	0	0	0	420	38,634	157	2	159
Congo (Brazzaville)	0	Ö	0	0	Ö	0	6,437	26	0	26
Congo (Kinshasa) d	0	0	0	0	0	0	1,343	6	0	6
	98	0	0	0	0				1	
Ecuador		-	-	-		325	4,354	17		18
Egypt	70	0	0	0	0	128	128	0	1	1
France	828	0	47	0	10	2,048	2,048	0	8	8
Gabon	0	0	0	0	0	0	25,591	105	0	105
Germany, FR	231	0	0	0	5	1,361	1,361	0	6	6
Greece	311	0	0	0	0	311	311	0	1	1
Guatemala	0	0	0	0	0	0	5,946	24	0	24
Italy	75	0	0	0	0	634	634	0	3	3
Japan	18	0	0	0	21	39	39	0	(s)	(s)
	0	0	0	0	0	70	70	0		: :
Korea, Republic of		-	-	-					(s)	(s)
Malaysia	0	0	0	0	0	0	3,111	13	0	13
Mexico	2,571	632	0	0	0	3,910	289,598	1,176	16	1,192
Netherlands	715	0	0	0	0	1,686	1,686	0	7	7
Netherlands Antilles	97	1,067	0	0	0	9,341	10,341	4	38	43
Norway	0	350	0	0	0	2,140	17,848	65	9	73
Oman	Ō	0	Ö	Ō	0	512	512	0	2	2
Peru	Ö	Õ	0	0	Ő	0.2	2,742	11	0	11
Portugal	0	0	0	0	Ö	1,625	1,625	0	7	7
	583	0	0	0	0			0	2	2
Puerto Rico		-	-	-		583	583	-		
Russia	0	0	0	0	0	94	3,144	13	(s)	13
Singapore	0	0	0	0	0	13	130	(s)	(s)	1
Spain	273	244	0	0	0	797	797	0	3	3
Trinidad and Tobago	0	0	0	0	0	0	10,131	42	0	42
Tunisia	222	0	0	0	0	222	222	0	1	1
Turkey	288	173	0	0	0	605	605	0	2	2
United Kingdom	0	0	0	0	Ö	1,442	16,618	62	6	68
Virgin Islands	46	0	0	0	0	179	179	02	1	1
	0	0	0	0	0			7	0	
Yemen Other	372	0	0	0	8	0 2,338	1,628 5,651	7 14	10	7 23
Total	12,596	42,032	47	221	5,361	142,907	1,298,265	4,755	588	5,343
	,				•	,		,		,

(s) = Less than 500 barrels per day.

a Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

d Formerly Zaire.

e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 44. PAD Districts IV and V—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-August 1998
(Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
					PAD Dis	strict IV				
Non OPEC	31,652 31,652	1,573 1,573	0 0	0 0	142 142	0 0	1,200 1,200	0 0	0 0	0 0
Total	31,652	1,573	0	0	142	0	1,200	0	0	0

					PAD D	District V				
Arab OPEC	30,453	0	0	0	20	0	0	0	0	0
Iraq	12,778	0	0	0	0	0	0	0	0	0
Kuwait	9,585	0	0	0	0	0	0	0	0	0
Saudi Arabia	7,491	0	0	0	20	0	0	0	0	0
United Arab Emirates	599	0	0	0	0	0	0	0	0	0
Other OPEC	11,721	0	631	0	51	0	0	999	0	0
Indonesia	8,153	0	268	0	0	0	0	999	0	0
Nigeria	320	0	0	0	51	0	0	0	0	0
Venezuela	3,248	0	363	0	0	0	0	0	0	0
Non OPEC	77,159	20	4,852	1,105	776	1,624	502	196	0	3
Argentina	4,786	0	0	0	0	0	0	0	0	0
Australia	7,227	0	0	0	0	0	0	0	0	0
Belgium	0	0	0	26	0	0	0	0	0	0
Canada	28,490	20	107	0	165	16	238	0	0	3
China, People's Republic of	6,773	0	0	0	0	0	0	0	0	0
Ecuador	10,646	0	0	180	0	0	0	0	0	0
France	0	0	0	6	14	0	0	0	0	0
Germany, FR	0	0	0	4	0	0	0	0	0	0
Japan	0	0	40	0	0	0	130	0	0	0
Korea, Republic of	0	0	0	311	0	1,318	134	147	0	0
Malaysia	2,331	0	2,172	0	0	0	0	0	0	0
Mexico	5,530	0	0	0	0	0	0	0	0	0
Netherlands	0	0	0	76	39	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	289	0	0	0	0
New Zealand	509	0	0	0	0	0	0	0	0	0
Peru	6,124	0	0	0	0	0	0	0	0	0
Russia	97	0	0	0	0	0	0	0	0	0
Singapore	0	0	2,533	0	109	1	0	49	0	0
Virgin Islands	0	0	0	0	284	0	0	0	0	0
Other	4,646	0	0	502	165	0	0	0	0	0
Total	119,333	20	5,483	1,105	847	1,624	502	1,195	0	3
Persian Gulf ^e	30,453	0	0	0	20	0	0	0	0	0

Table 44. PAD Districts IV and V—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,^a January-August 1998 (Continued)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Total Crude Oil and Products	Crude Oil	Daily Average	Total
				P	'AD District	IV				
Non OPEC	0 0	0 0	0 0	63 63	945 945	3,923 3,923	35,575 35,575	130 130	16 16	146 146
Total	0	0	0	63	945	3,923	35,575	130	16	146

					PAD Distric	t V				
Arab OPEC	0	0	0	0	5,200	5,220	35,673	125	21	147
Iraq	0	0	0	0	0	0	12,778	53	0	53
Kuwait	0	0	0	0	0	0	9,585	39	0	39
Saudi Arabia	0	0	0	0	5,200	5,220	12,711	31	21	52
United Arab Emirates	0	0	0	0	0	0	599	2	0	2
Other OPEC	0	0	0	0	1,052	2,733	14,454	48	11	59
Indonesia	0	0	0	0	0	1,267	9,420	34	5	39
Nigeria	0	0	0	0	0	51	371	1	(s)	2
Venezuela	0	0	0	0	1,052	1,415	4,663	13	`6	19
Non OPEC	99	0	0	12	4,617	13,806	90,965	318	57	374
Argentina	0	0	0	0	, 0	0	4,786	20	0	20
Australia	0	0	0	Ö	0	0	7,227	30	Ö	30
Belgium	0	0	0	0	0	26	26	0	(s)	(s)
Canada	0	0	0	12	3,992	4,553	33,043	117	19	136
China, People's Republic of	0	0	0	0	0	0	6.773	28	0	28
Ecuador	0	0	0	0	0	180	10,826	44	1	45
France	0	0	0	0	0	20	20	0	(s)	(s)
Germany, FR	0	0	0	0	0	4	4	0	(s)	(s)
Japan	0	0	0	0	0	170	170	0	1	ĺ
Korea, Republic of	99	0	0	0	399	2.408	2.408	0	10	10
Malaysia	0	0	0	0	0	2,172	4,503	10	9	19
Mexico	0	0	0	0	18	18	5,548	23	(s)	23
Netherlands	0	0	0	0	0	115	115	0	(s)	(s)
Netherlands Antilles	0	0	0	0	0	289	289	0	1	ì
New Zealand	0	0	0	0	0	0	509	2	0	2
Peru	0	0	0	0	0	0	6.124	25	0	25
Russia	0	0	0	0	0	0	97	(s)	0	(s)
Singapore	0	0	0	0	208	2,900	2,900	`ó	12	12
Virgin Islands	0	0	0	0	0	284	284	0	1	1
Other	0	0	0	0	0	667	5,313	19	3	22
Total	99	0	0	12	10,869	21,759	141,092	491	90	581
Persian Gulf ^e	0	0	0	0	5,200	5,220	35,673	125	21	147

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
 Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and

e Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

⁽s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Table 45. Exports of Crude Oil and Petroleum Products by PAD District, August 1998

		Petroleur	n Administration	on for Defens	e Districts		
Commodity	I	II	III	IV	v	U.S. Total	Daily Average
Crude Oil ^a	34	749	2	0	800	1,585	51
Natural Gas Liquids	54	102	396	4	267	822	27
Pentanes Plus	1	29	0	4	0	34	1
Liquefied Petroleum Gases	53	73	396	(s)	267	789	25
Ethane/Ethylene	0	0	0	Ó	0	0	0
Propane/Propylene	25	25	336	(s)	91	478	15
Normal Butane/Butylene	27	49	59	Ò	176	311	10
Isobutane/Isobutylene	0	0	0	0	0	0	0
other Liquids	76	1	1,768	0	77	1,923	62
Other Hydrocarbons/Oxygenates	76	1	951	0	77	1,105	36
Motor Gasoline Blend. Comp	1	0	817	0	0	818	26
Finished Petroleum Products	775	588	12,497	14	5,984	19,858	641
Finished Motor Gasoline	36	117	3,706	0	507	4,367	141
Naphtha-Type Jet Fuel	1	(s)	28	0	(s)	29	1
Kerosene-Type Jet Fuel	2	Ò	46	0	177	225	7
Kerosene	3	(s)	(s)	0	2	6	(s)
Distillate Fuel Oil	66	` 6	3,483	0	1,085	4,639	1 <u>5</u> 0
Residual Fuel Oil	262	1	2,009	0	976	3,248	105
Special Naphthas	28	8	14	(s)	698	748	24
Lubricants	127	65	431	ìó	94	726	23
Waxes	24	29	47	2	12	114	4
Petroleum Coke	209	244	2,705	0	2,410	5,568	180
Asphalt and Road Oil	14	118	27	1	21	182	6
Miscellaneous Products	4	(s)	1	0	1	6	(s)
Fotal	940	1,440	14,662	18	7,128	24,187	780

a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

⁽s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.

Table 46. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January-August 1998

		Petroleu	m Administration	on for Defens	se Districts		
Commodity	ı	Ш	=	IV	v	U.S. Total	Daily Average
Crude Oil ^a	360	13,967	3	135	17,291	31,756	131
Natural Gas Liquids	448	4.826	3.385	41	3,339	12.038	50
Pentanes Plus	12	2,770	0	36	1	2.818	12
Liquefied Petroleum Gases	436	2,056	3,385	5	3,338	9,220	38
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	237	663	2,724	5	1,655	5,283	22
Normal Butane/Butylene	199	1,393	660	0	1,684	3,937	16
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	110	11	6,887	0	462	7,471	31
Other Hydrocarbons/Oxygenates	105	11	3,287	0	322	3,725	15
Motor Gasoline Blend. Comp	5	(s)	3,600	0	140	3,745	15
Finished Petroleum Products	8,434	4,887	117,047	92	54,573	185,032	761
Finished Motor Gasoline	524	583	23,328	3	5,118	29,556	122
Naphtha-Type Jet Fuel	228	(s)	160	0	19	408	2
Kerosene-Type Jet Fuel	459	379	2,875	(s)	2,449	6,163	25
Kerosene	22	13	53	0	46	134	1
Distillate Fuel Oil	1,037	280	23,157	(s)	9,257	33,731	139
Residual Fuel Oil	2,968	108	22,301	Ò	9,942	35,319	145
Special Naphthas	352	97	401	2	3,422	4,275	18
Lubricants	1,136	458	3,711	64	777	6,146	25
Waxes	193	179	250	13	87	722	3
Petroleum Coke	1,371	1,181	40,529	(s)	23,224	66,306	273
Asphalt and Road Oil	107	1,605	277	` á	158	2,156	9
Miscellaneous Products	35	3	4	0	74	116	(s)
Total	9,352	23,692	127,322	267	75,665	236,297	972

^a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

⁽s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.

Table 47. Exports of Crude Oil and Petroleum Products by Destination, August 1998 (Thousand Barrels)

Destination	Crude Oil ^a	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
Argentina	0	0	0	0	0	0	0	(s)
Australia	0	0	1	0	(s)	0	1	Ó
Bahama Islands	0	0	2	1	ìί	(s)	40	84
Bahrain	0	0	0	0	0	Ò	0	0
Belgium & Luxembourg	0	0	0	0	0	0	1	(s)
Brazil	0	0	0	0	0	0	136	Ô
Canada	786	33	108	269	178	1	218	265
Chile	0	0	1	(s)	0	0	283	0
China, People's Republic of	0	0	0	0	0	0	. 1	0
China, Taiwan	0	0	0	261	0	0	(s)	0
Colombia	0	0	1	0	0	0	(s)	1
Costa Rica	0	0	0	0	0	0	207	0
Denmark	0	0	0	0	0	0	0	0
Dominican Republic	0	0	63	36	0	0	60	143
Ecuador	0	0	172	220	0	0	332	0
Egypt	0 0	0	0	0	0	0	(s) 1	0
El SalvadorFinland	0	0	0	0	0	0	0	0
France	0	(s)	0	35	0	0	0	3
French Pacific Islands	0	0	0	0	0	1	1	0
Germany, FR	0	0	0	0	0	0	(s)	(s)
Ghana	0	0	0	0	0	0	0	0
Greece	Ö	0	0	0	0	0	0	0
Guatemala	Ö	Ö	Ô	177	0	0	164	0
Guinea	0	0	0	0	0	0	0	0
Honduras	Ö	0	0	66	14	0	218	0
Hong Kong	Ö	Ö	Ö	0	0	Ö	0	Ö
India	Ö	Ō	Ö	Ō	Ö	Ö	0	Ö
Indonesia	0	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0	0
Israel	0	0	(s)	0	0	0	1	0
Italy	0	0	(s)	1	0	0	0	0
Jamaica	0	0	` á	(s)	0	0	1	687
Japan	0	0	0	0	1	0	4	12
Korea, Republic of	797	0	0	0	0	0	4	200
Malaysia	0	0	0	0	0	0	(s)	0
Mexico	2	0	395	2,908	51	1	2,050	1,453
Netherlands	0	0	0	0	0	0	. 1	8
Netherlands Antilles	0	0	0	0	0	0	(s)	220
New Zealand	0	0	(s)	0	0	0	0	0
Nigeria	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0
Panama	0	0	22	0	0	0	594	0
Peru	0	0	0	0	0	0	200	0
Philippines	0	0	0	0	0	0	(s) 0	0 0
Puerto Rico	0	0	(s)	(s)	0	0	(s)	0
Russia	0	0	(5)	99	0	1	(5)	4
Saudi Arabia	0	0	(s)	0	0	0	0	0
Singapore	0	0	(5)	0	0	0	(s)	101
South Africa	0	0	0	0	0	0	2	0
Spain	Ö	0	0	Ö	0	0	0	0
Suriname	Ö	0	0	0	0	0	Ő	0
Sweden	Ö	Ö	0	Ö	0	0	Ő	Ö
Switzerland	Ö	0	0	0	0	0	(s)	0
Thailand	Ö	0	2	Ö	0	0	37	68
Trinidad and Tobago	Ö	Ö	0	280	Ö	Ö	0	0
Turkey	Ō	0	Ō	0	Ō	Ō	0	0
United Arab Emirates	0	0	0	0	0	0	(s)	0
United Kingdom	0	(s)	6	(s)	(s)	0	9	0
Uruguay	0	Ò	0	Ò	Ò	0	0	0
Venezuela	0	0	0	0	0	0	(s)	0
Virgin Islands	0	0	0	0	0	0	Ó	0
Yugoslavia	0	0	0	0	0	0	0	0
Other	0	0	9	14	9	0	71	0

Table 47. Exports of Crude Oil and Petroleum Products by Destination, August 1998 (Continued) (Thousand Barrels)

							Crude Oil a	nd Products
Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products ^b	Total	Daily Average
Argentina	(s)	5	(s)	(s)	0	(s)	6	(s)
Australia	(s)	7	(s)	290	(s)	0	299	10
Bahama Islands	0	2	(s)	0	(s)	0	131	4
Bahrain	Ö	(s)	0	0	0	0	(s)	(s)
Belgium & Luxembourg	0	2	(s)	0	0	34	37	1
Brazil	(s)	1	(s)	404	(s)	4	544	18
	· /		(s) 54	404 457	` '	185		92
Canada	14	147			136		2,852	
Chile	(s)	8	(s)	33	1	0	326	11
China, People's Republic of	1	3	0	0	0	0	5	(s)
China, Taiwan	(s)	17	4	2	(s)	(s)	286	9
Colombia	1	73	1	0	1	1	78	3
Costa Rica	(s)	10	(s)	0	0	(s)	217	7
Denmark	0	(s)	0	0	0	0	(s)	(s)
Dominican Republic	0	35	0	120	0	1	458	15
Ecuador	0	19	0	0	0	(s)	743	24
Egypt	0	(s)	0	0	(s)	Ò	(s)	(s)
El Salvador	0	3	0	0	Ó	0	4	(s)
Finland	Ö	1	Ö	Ö	Ö	40	41	1
France	0	3	2	96	0	0	140	5
French Pacific Islands	(s)	(s)	0	0	0	0	2	(s)
Germany, FR	(S) 0	(8)	21	34	4	(s)	62	(5)
Ghana	0		0	0	0	(S) 0		
		(s)	-		-	-	(s)	(s)
Greece	0	3	0	0	0	0	3	(s)
Guatemala	1	14	(s)	0	0	23	379	12
Guinea	0	(s)	0	0	0	0	(s)	(s)
Honduras	(s)	12	(s)	0	0	0	310	10
Hong Kong	0	2	1	0	0	(s)	3	(s)
India	0	27	1	2	(s)	1	30	1
Indonesia	0	1	(s)	0	0	32	32	1
Ireland	0	(s)	(s)	170	0	(s)	171	6
Israel	(s)	1	(s)	309	0	(s)	312	10
Italy	(s)	26	(s)	213	(s)	40	281	9
Jamaica	4	2	(s)	0	Ò	17	714	23
Japan	694	12	`á	748	(s)	16	1,490	48
Korea, Republic of	1	5	1	(s)	1	30	1,039	34
Malaysia	Ö	1	0	5	0	(s)	6	(s)
Mexico	5	154	22	586	25	852	8,503	274
	(s)	3	(s)	854	5	32	904	29
Netherlands Netherlands Antilles	0	1	(s) 0	0	(s)	205	426	14
	0	1	0	0	(s) 0	0		
New Zealand	-	1	-	-	-	-	2	(s)
Nigeria	0	1	0	0	0	0	1	(s)
Norway	0	(s)	(s)	0	0	0	(s)	(s)
Panama	0	3	(s)	0	0	0	618	20
Peru	0	2	1	(s)	0	48	250	8
Philippines	(s)	1	(s)	0	0	(s)	1	(s)
Portugal	0	(s)	0	0	0	0	(s)	(s)
Puerto Rico	19	16	(s)	0	0	(s)	36	1
Russia	(s)	3	0	0	0	0	109	4
Saudi Arabia	(s)	3	(s)	55	0	0	58	2
Singapore	(s)	5	(s)	(s)	1	0	109	4
South Africa	Ó	22	(s)	83	(s)	0	106	3
Spain	0	(s)	(s)	492	Ó	0	492	16
Suriname	Ö	1	0	0	Ö	Ö	1	(s)
Sweden	0	1	(s)	0	0	(s)	1	(s)
Switzerland	0		(s)	0	0	32	32	1
	0	(s)		0	0			4
Thailand		2	(s)			(s)	109	
Trinidad and Tobago	3	2	0	0	0	0	284	9
Turkey	(s)	34	0	238	(s)	0	273	9
United Arab Emirates	0	(s <u>)</u>	0	55	0	0	55	2
United Kingdom	(s)	5	1	180	5	(s)	207	7
Uruguay	0	1	(s)	0	0	0	1	(s)
Venezuela	(s)	3	Ó	140	(s)	335	478	15
Virgin Islands	Ó	(s)	0	0	Ó	0	(s)	(s)
Yugoslavia	0	(s)	0	0	0	0	(s)	(s)
Other	4	17	(s)	Ö	1	(s)	125	4
otal	748	726	114	5,568	182	1,928	24,187	780

^a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

countries for one year.

^b Includes miscellaneous products, motor gasoline blending components, and other hydrocarbons and oxygenates.

⁽s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.

Table 48. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-August 1998

Destination	Crude Oil ^a	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residua Fuel Oil
Argentina	0	0	(s)	1	199	0	304	2
Australia		0	12	(s)	(s)	1	8	2
Bahama Islands		0	70	255	117	1	583	491
		0		0	0	0	0	491
Bahrain	-	-	(s)		-	-	-	0
Belgium & Luxembourg		0	0	1	(s)	0	8	1
Brazil		0	(s)	0	82	(s)	1,375	(s)
Cameroon		0	0	0	0	0	0	0
Canada	14,767	2,815	2,372	3,247	2,762	21	1,803	3,421
Chile	0	0	1	88	0	0	385	0
China, People's Republic of	5,291	0	(s)	(s)	0	0	1,652	1,483
China, Taiwan		0	(s)	489	0	1	165	(s)
Colombia		0	198	0	0	(s)	3	1
Costa Rica		0	(s)	14	37	0	1,944	222
	-	-				-		
Denmark		0	0	0	0	0	0	0
Dominican Republic		0	353	36	0	0	378	1,172
Ecuador	0	0	353	1,076	0	1	1,626	0
gypt	0	0	0	0	0	0	1	0
Salvador		1	0	201	34	0	857	0
inland	-	0	Ö	0	111	2	250	Ö
rance	-	(s)	1	35	0	0	2	5
		` '	•		-			
rench Pacific Islands		1	0	0	0	1	139	0
Germany, FR		0	39	0	(s)	(s)	9	(s)
Ghana	0	0	0	0	0	0	0	0
reece	0	0	0	0	0	0	2	0
Suatemala	0	0	1	1,446	96	(s)	1,424	0
Guinea		0	0	0	(s)	0	1	0
londuras		0	13	484	115	0	1,287	437
		-						
long Kong		0	(s)	0	0	1	12	0
ndia		0	0	0	0	0	52	0
ndonesia	0	0	0	0	0	0	(s)	0
reland	0	0	0	0	0	0	(s)	0
srael	0	0	6	(s)	1,542	2	201	0
taly		(s)	1	3	0	(s)	1	310
amaica		0	84	1	44	0	7	5,657
	-	-	• .		44	-		,
apan	*	0	116	5	1	0	106	367
Corea, Republic of		0	5	0	0	(s)	109	297
/lalaysia		0	(s)	0	0	0	13	0
Mexico	3	0	5,304	19,626	499	87	7,624	15,361
letherlands	0	0	(s)	0	234	0	153	421
letherlands Antilles		0	<u>2</u> 9	533	0	0	1,776	1,553
lew Zealand		0	1	(s)	(s)	0	(s)	0
	-	0	1	318	0	0	296	240
ligeria	-	-	-		-	-		
lorway		0	2	0	0	0	0	1
Panama		0	138	257	360	(s)	5,234	2,263
eru	0	0	0	87	0	1	783	0
hilippines	0	0	0	0	0	0	1	0
oland	0	0	0	0	0	0	1	0
Portugal		0	0	0	Ō	Ō	(s)	Ö
uerto Rico	-	(s)	1	1	205	(s)	359	(s)
	_	0	1	•				
Russia			(0)	402	97	8	100	10
audi Arabia		0	(s)	0	(s)	1	1	1
ingapore		0	4	268	0	0	1,287	689
South Africa	0	0	(s)	0	0	0	5	0
pain	0	0	(s)	0	0	0	273	0
uriname		0	Ó	0	0	0	(s)	0
weden		0	0	1	0	0	7	0
		0	0	0	0			0
witzerland	-		-		-	(s)	(s)	
hailand		(s)	2	0	0	0	408	547
rinidad and Tobago		0	2	430	0	0	76	0
urkey	0	0	0	2	0	(s)	1	0
nited Arab Emirates		0	(s)	0	0	`ź	5	0
Inited Kingdom		(s)	29	1	(s)	1	25	12
Iruguay		0	0	Ö	(3)	Ö	(s)	0
	-		-					
enezuela		0	2	25	0	0	296	(s)
irgin Islands		0	0	0	0	0	(s)	0
⁄ugoslavia	0	0	0	0	0	0	0	0
Other		0	73	222	33	1	309	354
	•	J	. 0		30		500	00 1

Table 48. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-August 1998 (Continued)

Destination					A		Crude Oil a	na Product
Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products ^b	Total	Daily Averag
Argentina	16	73	4	1	1	1	602	2
Australia		44	4	2,569	2	(s)	2,651	11
Bahama Islands		23	(s)	0	1	(s)	1,544	6
Bahrain		1	0	491	(s)	0	492	2
Belgium & Luxembourg	. ,	124	1	3,152	1	171	3,460	14
		296	2				,	15
Brazil				1,800	1	16	3,590	
Cameroon		(s)	0	83	0	0	83	(s)
Canada		1,049	359	3,391	1,722	340	38,406	158
Chile		174	1	330	. 1	(s)	986	4
China, People's Republic of		31	1	0	(s)	(s)	8,465	35
China, Taiwan		174	7	42	2	22	3,512	14
Colombia	. 8	226	5	124	1	8	576	2
Costa Rica	3	78	2	0	59	1	2,360	10
Denmark	. 0	(s)	1	693	7	0	701	3
Dominican Republic	4	145	1	318	12	2	2.420	10
cuador		105	1	0	0	547	3,929	16
gypt		19	0	0	2	0	22	(s)
El Salvador		35	(s)	86	0	0	1,214	5
Finland		37	(s)	0	1	40	441	2
				-	0			
rance		17	30	2,181	-	(s)	2,274	9
French Pacific Islands		1	0	0	0	0	143	1
Germany, FR		39	60	266	27	2	444	2
Ghana		2	0	0	0	0	2	(s)
Greece	0	14	(s)	230	0	(s)	247	1
Guatemala	. 5	125	3	0	0	24	3,125	13
Guinea	. 0	13	0	0	0	0	14	(s)
Honduras	. 7	89	2	0	0	(s)	2.433	ìó
Hong Kong		50	6	0	(s)	(s)	73	(s)
ndia	-	236	3	204	15	1	510	2
ndonesia	(-)	5	(s)	83	(s)	64	152	1
	` '	1						1
reland	` '	•	2	322	0	1	325	
srael		17	(s)	1,061	5	(s)	2,834	12
taly	1. 1	66	4	7,087	2	62	7,537	31
lamaica		29	(s)	77	12	57	5,991	25
lapan	. 3,216	174	24	9,113	7	100	15,112	62
Korea, Republic of	. 148	22	3	1,481	5	113	9,394	39
Malaysia	(s)	11	1	13	(s)	2	41	(s)
Mexico	. 86	1,171	171	1,962	195	4,210	56,298	232
Netherlands	. 5	43	2	6,702	26	137	7,724	32
Netherlands Antilles		195	(s)	0	(s)	205	4,292	18
New Zealand		11	(s)	352	(s)	0	365	2
Nigeria		75	(s)	44	0	0	974	4
		2	1 1	155	0	0	161	1
Norway			(s)		-	-		-
Panama	` '	82	1	(s)	0	1	8,337	34
Peru		14	2	3	(s)	51	944	4
Philippines	` '	32	3	2	0	1	39	(s)
Poland	. 0	1	0	0	0	0	1	(s)
Portugal	. (s)	(s)	(s)	363	0	0	364	1
Puerto Rico	. 68	151	2	0	(s)	2	791	3
Russia		42	(s)	0	ìí	(s)	662	3
Saudi Arabia		14	(s)	96	0	1	115	(s)
Singapore		121	1	28	2	32	2,434	10
South Africa		136	(s)	646	1	(s)	789	3
		4	1	8,424	2	3	8,706	36
Spain								
Suriname		8	(s)	0	0	0	8	(s)
Sweden	· ,	7	1	763	0	(s)	780	3
Switzerland		2	(s)	0	(s)	32	43	(s)
hailand		59	1	(s)	3	3	1,034	4
rinidad and Tobago		10	(s)	1	0	77	600	2
urkey	(s)	86	(s)	4,625	1	7	4,723	19
Jnited Arab Emirates		13	(s)	584	1	(s)	606	2
Jnited Kingdom		27	5	2,839	22	17	2,980	12
Jruguay	_	9	(s)	0	0	(s)	10	(s)
/enezuela		143	2	1,186	5	1,231	2,892	12
	` '	2	0	0	0		2,092	
/irgin Islands						(s)		(s)
/ugoslavia		2	0	23	0	(s)	25	(s)
Other	36	143	1	2,307	9	2	3,494	14
							,	

a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

b Includes miscellaneous products, motor gasoline blending components, and other hydrocarbons and oxygenates.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Table 49. Net Imports of Crude Oil and Petroleum Products into the United States by Country, August 1998

(Thousand Barrels per Day)

Country	Crude Oil ^a	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products ^b	Total Products	Total Crude Oil and Products
Arab OPEC	2,463	67	15	0	1	33	-4	(s)	171	283	2,746
Algeria	10	67	0	0	0	33	0	(s)	155	255	264
Iraq	713	0	0	0	0	0	0	0	0	0	713
Kuwait	273	0	0	0	0	0	0	(s)	(s)	(s)	273
Qatar	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Saudi Arabia	1,468	(s)	15	0	1	0	-2	(s)	16	30	1,498
United Arab Emirates	0	0	0	0	(s)	0	-2	(s)	0	-2	-2
Other OPEC	2,116	24	70	13	46	46	-5	(s)	151	345	2,461
Indonesia	41	0	0	0	0	0	0	(s)	17	17	58
Nigeria	726	0	0	0	0	10	0	(s)	0	10	736
Venezuela	1,349	24	70	13	46	37	-5	(s)	134	319	1,668
Non OPEC		80	96	48	-23	45	-172	-13	268	329	4,842
Angola	422	0	0	0	0	0	0	0	0	0	422
Argentina	73	0	0	0	0	(s)	(s)	(s)	8	7	81
Australia	21	(s)	0	(s)	(s)	0	-9 0	(s)	21	12 -4	32
Bahama Islands	0	(s)	(s)	(s)	-1 (a)	-3	-	(s)	(s)	-	-4
Belgium & Luxembourg	0	0 0	(s) 19	0	(s) -4	(s) 0	0 -13	(s)	23 9	24 11	24 11
Brazil Brunei	13	0	0	0	0	0	0	(s) 0	0	0	13
_	0	0	0	0	0	13	0	0	0	13	13
Cameroon Canada	1,223	81	52	4	46	35	-15	-3	40	240	1,463
China, People's Republic of	57	0	0	0	(s)	0	0	(s)	(s)	(s)	57
China, Taiwan	0	0	-8	0	(s)	0	(s)	(S) -1	(s)	(s) -9	-9
Colombia	357	(s)	0	3	(s)	(s)	0	-1 -2	(s)	1	358
Congo (Brazzaville)	62	0	0	0	(3)	(3)	0	(s)	(3)	(s)	62
Congo (Kinshasa) c	26	0	0	0	0	0	0	0	0	(3)	26
Ecuador	158	-6	-7	0	-11	0	Ö	-1	(s)	-24	134
Egypt	22	0	0	0	(s)	0	0	(s)	(s)	(s)	22
France	0	Ő	9	0	0	(s)	-3	(s)	14	21	21
Gabon	118	Ő	0	0	0	0	Ö	0	0	0	118
Germany, FR	0	0	(s)	0	(s)	24	-1	(s)	-1	22	22
Greece	0	0	Ó	0	Ó	0	0	(s)	0	(s)	(s)
Guatemala	29	0	-6	0	-5	0	0	(s)	-1	-ÌŹ	17
India	0	0	0	0	0	0	(s)	-1	(s)	-1	-1
Italy	0	(s)	7	0	0	0	-7	-1	ìí	1	1
Jamaica	0	(s)	(s)	0	(s)	-22	0	(s)	-1	-23	-23
Japan	0	0	0	(s)	(s)	(s)	-24	(s)	-23	-48	-48
Korea, Republic of	-26	0	0	16	(s)	-6	(s)	(s)	5	14	-11
Malaysia	4	0	0	0	(s)	0	(s)	(s)	7	7	11
Mexico	1,139	-13	-94	-2	-66	-47	-19	-5	-15	-260	879
Netherlands	0	0	1	0	(s)	(s)	-28	(s)	9	-18	-18
Netherlands Antilles	0	0	0	6	(s)	-1	0	(s)	22	27	27
Norway	260	21	1	0	0	0	0	(s)	4	27	287
Oman	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Panama	0	-1	0	0	-19	0	0	(s)	(s)	-20	-20
Peru	35	0	0	0	-6	0	(s)	(s)	-2	-8	27
Puerto Rico	0	(s)	(s)	0	(s)	0	0	7	15	21	21
Romania	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Russia	0	0	-3	0	(s)	(s)	0	(s)	(s)	-3	-3
Spain	0	0	(s)	0	0	0	-16	(s)	8	-8 (a)	-8
Sweden	0	0	(s)	0	0	0	0	(s)	(s)	(s)	(s)
Thailand	0	(s)	0	0	-1	-2	0	(s)	(s)	-4	-4 52
Trinidad and Tobago	53 0	0 0	-9 0	0	9	1 0	0 -8	(s) -1	(s)	1 -9	53 -9
Turkey			1	-		13	-o -6		(s) 63	-9 70	365
United Kingdom Virgin Islands	295 0	(s) 0	116	(s) 21	(s) 65	50	-6 0	(s) (s)	27	279	279
Yemen	31	0	0	0	0	0	0	(5)	0	0	31
Other	143	-2	15	-1	-27	-8	-23	-4	33	-17	126
Total	9,092	170	180	61	24	124	-180	-14	590	957	10,049
Persian Gulf ^d	2,453	(s)	15	0	1	0	-4	(s)	16	29	2,482

^a Includes crude oil imported for storage in the Strategic Petroleum Reserve.

b Includes asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, miscellaneous products, motor gasoline blending components, naphtha for petrochemical feedstock use, other hydrocarbons and oxygenates, other oils for petrochemical feedstock use, special naphthas, unfinished oils, and waxes.

^c Formerly Zaire.

d Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

⁽s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-814, "Monthly Imports Report" and the U.S. Bureau of the Census.

Table 50. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-August 1998

(Thousand Barrels per Day)

Country	Crude Oil ^a	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products ^b	Total Products	Total Crude Oil and Products
Arab OPEC	1,959	72	22	(s)	1	40	-3	(s)	251	383	2,342
Algeria		67	0	0	0	35	0	(s)	190	291	305
Iraq		0	0	0	0	0	0	0	0	0	227
Kuwait		0	0	0	(s)	0	(s)	(s)	(s)	(s)	304
Qatar		0	0	0	0	0	0	(s)	4	4	6
Saudi Arabia United Arab Emirates		5 (s)	22 0	(s) 0	1 (s)	6 0	(s) -2	(s) (s)	57 (s)	90 -2	1,498 2
Other OPEC	2,154	14	48	30	40	44	-5	-1	139	309	2,463
Indonesia	35	0	0	0	(s)	4	(s)	(s)	2	6	41
Nigeria	750	(s)	-1	0	-1	3	(s)	(s)	1	1	751
Venezuela	1,370	14	49	30	41	38	-5	-1	136	302	1,671
Non OPEC		96	107	19	12	-23	-264	-15	351	284	4,625
Angola		(s)	0 2	0 -1	0 -1	(e)	(e)	(s)	1 15	1 15	434 88
Argentina Australia		(s) (s)	(s)	(s)	(s)	(s) (s)	(s) -11	(s) (s)	22	11	43
Bahama Islands		(s)	(S) -1	(s) (s)	(s) -2	(s) -2	0	(s)	(s)	-6	-6
Belgium & Luxembourg		0	4	(s)	(s)	3	-13	-1	26	19	19
Benin		0	0	0	0	0	0	(s)	0	(s)	(s)
Brazil		(s)	6	(s)	-6	3	-7	-1	12	7	7
Brunei	11	Ó	0	Ó	0	0	0	(s)	1	1	11
Cameroon	0	0	0	0	0	3	(s)	(s)	0	2	2
Canada	,	108	43	-10	52	8	-13	-2	29	215	1,450
China, People's Republic of		(s)	(s)	0	-7	-6	0	(s)	(s)	-13	23
China, Taiwan		(s)	-2	0	-1	(s)	(s)	-1	(s)	-4	-14
Colombia		-1	0	(s)	(s)	1	-1	-1 (-)	2	1	305
Congo (Brazzaville) Congo (Kinshasa) ^C		0	0	0 0	0	0	0	(s)	0	(s)	43 21
Ecuador		-1	-4	0	-7	1	0	(s) (s)	-1	(s) -13	∠1 81
Egypt		0	0	0	(s)	0	0	(s)	1	(s)	12
France		(s)	11	0	(s)	(s)	-9	(s)	28	30	30
Gabon		0	0	Õ	0	0	Ö	(s)	0	(s)	212
Germany, FR		(s)	1	(s)	(s)	9	-1	(s)	5	13	13
Greece	0	Ô	0	0	(s)	0	-1	(s)	1	(s)	(s)
Guatemala		(s)	-6	(s)	-6	0	0	-1	(s)	-13	12
India		0	0	0	(s)	0	-1	-1	(s)	-2	-2
Italy		(s)	4	0	(s)	1	-29	(s)	8	-16	-16
Jamaica		(s)	(s)	(s)	(s)	-23 -2	(s) -38	(s) -1	(s) -12	-25 -52	-25 -60
Japan Korea, Republic of		(s) (s)	(s) 0	(s) 5	(s) (s)	- <u>-</u> 2 -1	-30 -6	(s)	3	-52 1	-28
Malaysia		(s)	0	0	(s)	0	(s)	(s)	9	9	31
Mexico		-22	-81	-2	-31	-63	-8	-5	1	-210	1,109
Netherlands		(s)	3	-1	-1	(s)	-28	(s)	16	-10	-10
Netherlands Antilles		(s)	-2	13	-7	4	0	-1	38	44	48
Norway		9	3	0	0	(s)	-1	(s)	3	13	239
Oman		0	0	0	0	0	0	(s)	2	2	2
Panama		-1	-1	-1	-22	-9	(s)	(s)	(s)	-34	-34
Peru		0	(s)	0	-3	1	(s)	(s)	(s)	-3	39
Puerto Rico	. 0	(s)	(s)	-1	-1 1	(s)	U	6	გ ა	12	12
Romania Russia		(s)	(s)	0 (s)	1 (s)	0 (s)	0	(s) (s)	3 (s)	4 -1	4 12
Syria		(s) (s)	(s) 0	(s) 0	(s) 0	(s) 0	0	(S) (S)	(S) (S)	(s)	(s)
Spain		(s)	4	0	-1	2	-35	(s)	(5)	-21	-21
Sweden		0	(s)	0	(s)	0	-3	(s)	1	-2	-2
Thailand		(s)	0	ő	-2	-2	(s)	(s)	(s)	-4	-4
Trinidad and Tobago	54	(s)	1	0	1	1	(s)	(s)	1	4	58
Turkey	0	0	(s)	0	(s)	0	-19	(s)	2	-17	-17
United Kingdom		7		(s)	(s)	9	-12	(s)	51	60	194
Virgin Islands		0	111	22	87	50	0	(s)	34	304	304
Yemen		0	0	0	0	0	0	0	0	0	7
Other		-2	9	-5 40	-29	-11	-29	-4	33	-39	-1
Total	•	182	177	48	53	62	-272	-16	740	976	9,430
Persian Gulf ^d	1,945	5	22	(s)	1	6	-5	(s)	63	91	2,037

a Includes crude oil imported for storage in the Strategic Petroleum Reserve.
b Includes asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, miscellaneous products, motor gasoline blending components, naphtha for petrochemical feedstock use, other hydrocarbons and oxygenates, other oils for petrochemical feedstock use, pentanes plus, special naphthas, unfinished oils, and waxes.

^c Formerly Zaire.

d Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

⁽s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-814, "Monthly Imports Report" and the U.S. Bureau of the Census.

Table 51. Stocks of Crude Oil and Petroleum Products by PAD District, August 1998

		Petroleum Adm	inistration for D	efense Districts		
Commodity	I	II	III	IV	v	U. S. Total
Crude Oil	. 14,486	72,709	737,359	11,874	57,125	893,553
Refinery		14,763	51,201	2,116	22,451	104,197
Tank Farms and Pipelines		56,989	109,029	8,960	27,123	202,903
Leases		957	13,703	798	810	16,286
Strategic Petroleum Reserve		0	563,426	0	0	563,426
Alaskan In Transit		0	0	0	6,741	6,741
otal Stocks, All Oils (excluding Crude Oil)	. 190,223	188,283	290,580	16,076	92,853	778,015
Refinery	. 59,443	66,347	150,261	10,334	63,083	349,468
Bulk Terminal	. 100,253	80,695	85,865	2,601	22,111	291,525
Pipeline	. 30,481	38,810	51,365	2,837	7,476	130,969
Natural Gas Processing Plant	. 46	2,431	3,089	304	183	6,053
entanes Plus		2,589	6,381	214	67	9,283
Refinery		412	461	18	0	891
Bulk Terminal		1,272	3,525	1	47	4,869
Pipeline		532	1,648	71	0	2,251
Natural Gas Processing Plant	. 8	373	747	124	20	1,272
iquefied Petroleum Gases		48,657	80,353	1,291	6,483	145,208
Refinery		5,436	16,017	466	1,502	26,375
Bulk Terminal	. 3,010	33,431	47,003	176	4,818	88,438
Pipeline		7,732	14,991	469	0	25,614
Natural Gas Processing Plant	. 38	2,058	2,342	180	163	4,781
Ethane/Ethylene		5,145	16,129	200	0	21,474
Refinery		3	727	0	0	730
Bulk Terminal		2,904	12,226	0	0	15,130
Pipeline		1,902	2,791	197	0	4,890
Natural Gas Processing Plant	. 0	336	385	3	0	724
Propane/Propylene	*	31,115	32,805	513	2,909	72,555
Refinery		2,263	5,006	107	178	8,211
Bulk Terminal		24,552	18,788	170	2,600 0	48,284
Pipeline Natural Gas Processing Plant	,	3,238 1,062	8,391 620	152 84	131	14,136 1,924
Normal Butane/Butylene	. 2,810	9,674	25,907	390	3,050	41,831
Refinery		2,694	8,379	243	929	14,210
Bulk Terminal		4,506	13,520	6	2,101	20,969
Pipeline		1,995	3,138	78	2,101	5,211
Natural Gas Processing Plant		479	870	63	20	1,441
Isobutane/Isobutylene	. 401	2,723	5,512	188	524	9,348
Refinery		476	1,905	116	395	3,224
Bulk Terminal		1,469	2,469	0	117	4,055
Pipeline		597	671	42	0	1,377
Natural Gas Processing Plant		181	467	30	12	692
ther Hydrocarbons/Hydrogen/Oxygenates	. 2,105	1,887	4,315	402	3,842	12,551
Refinery	. 1,718	486	2,121	148	2,763	7,236
Bulk Terminal	. 387	1,241	2,013	229	519	4,389
Pipeline	. 0	160	181	25	560	926
Other Hydrocarbons/Hydrogen		24 24	1 1	0 0	4 4	29 29
Fuel Ethanol		1,664	608	162	545	3,277
Refinery		274	W	W	545 W	3,277
Bulk Terminal ^a		274 W	W	W	W	47 I
Pipeline		W	W	W	W	W
ETBE	. w	w	w	w	w	W
Refinery		W	W	W	W	V
Bulk Terminal		W	W	W	W	V
Pipeline		W	W	W	W	W
Methanol	. w	w	w	w	w	863
Wethanor	. **	**	**	**	**	

Table 51. Stocks of Crude Oil and Petroleum Products by PAD District, August 1998 (Continued)

Commodity						
	1	II	III	IV	v	U. S. Total
MTBE	1,353	W	3,157	W	3,224	8,130
Refinery	1,205	W	1,679	W	2,663	5,765
Bulk Terminal	W	W	1,297	W	24	1,647
Pipeline	W	W	181	W	537	718
Other Oxygenates b	W	W	W	W	w	V
Refinery	W	W	W	W	W	V
Bulk Terminal	W	W	W	W	W	V
Pipeline	W	W	W	W	W	V
Infinished Oils	11,419	14,486	48,487	2,419	20,091	96,902
Refinery						
Naphthas and Lighter	2,189	4,143	11,445	565	2,958	21,30
Kerosene and Light Gas Oils	1,920	2,024	7,913	365	5,213	17,43
Heavy Gas Oils	5,852	4,996	21,745	1,068	9,029	42,69
Residuum	1,458	3,323	7,384	421	2,891	15,47
lotor Gasoline Blending Components	6,038	11,518	15,781	1,507	7,494	42,33
Refinery	5,899	8,954	13,167	1,507	7,108	36,63
Bulk Terminal	139	803	1,341	0	100	2,38
Pipeline	0	1,761	1,273	0	286	3,32
viation Gasoline Blending Components	77	33	31	0	2	14
Refinery	77	33	31	0	2	14
nished Motor Gasoline	51,780	43,701	47,264	4,485	21,548	168,77
Refinery	10,262	9,416	19,283	2,032	10,686	51,67
Bulk Terminal	26,935	19,276	10,111	1,232	7,774	65.32
Pipeline	14,583	15,009	17,870	1,232	3,088	51,77
Reformulated	20,212	980	8,683	0	12,741	42,61
Refinery	6,129	416	3,703	0	6,821	17,06
*	,		,	0	,	,
Bulk Terminal Pipeline	9,937 4,146	359 205	1,866 3,114	0	4,169 1,751	16,33 9,21
•	100	202		400	-	4.04
Oxygenated	162	320	35	160	633	1,31
Refinery	7	213	0	0	0	22
Bulk Terminal	59	107	0	160	189	51
Pipeline	96	0	35	0	444	57
Other	31,406	42,401	38,546	4,325	8,174	124,85
Refinery	4,126	8,787	15,580	2,032	3,865	34,39
Bulk Terminal	16,939	18,810	8,245	1,072	3,416	48,48
Pipeline	10,341	14,804	14,721	1,221	893	41,98
nished Aviation Gasoline	228	304	386	34	595	1,54
Refinery	42	130	342	24	204	74
Bulk Terminal	186	92	44	3	391	71
Pipeline	0	82	0	7	0	8
aphtha-Type Jet Fuel	0	0	1	0	41	4
Refinery	0	0	1	0	37	3
Bulk Terminal	0	0	0	0	4	
Pipeline	0	0	0	0	0	
erosene-Type Jet Fuel	11,091	8,807	17,448	826	8,339	46,51
Refinery	1,265	3,348	8,715	400	4,334	18,06
Bulk Terminal	4,225	2,304	2,304	259	1,976	11,06
Pipeline						
Libelling	5,601	3,155	6,429	167	2,029	17,38

Table 51. Stocks of Crude Oil and Petroleum Products by PAD District, August 1998 (Continued)

-		Petroleum Adi	ministration for D	erense Districts	Petroleum Administration for Defense Districts									
Commodity	I	II	III	IV	V	U. S. Total								
Kerosene	3,063	1,028	1,994	88	96	6,26								
Refinery	309	305	898	83	80	1,67								
Bulk Terminal	2,654	686	939	0	4	4,28								
Pipeline	100	37	157	5	12	31								
Distillate Fuel Oil	70,703	34,805	31,931	2,644	10,383	150,46								
Refinery	16,139	10,425	16,420	1,241	5,459	49,68								
Bulk Terminal	46,789	14,040	6,711	539	3,687	71,76								
Pipeline	7,775	10,340	8,800	864	1,237	29,01								
0.05 Percent Sulfur and Under	19,831	24,416	18,815	2,241	7,536	72,83								
Refinery	3,029	6,555	8,846	948	4,114	23,49								
Bulk Terminal	12,482	9,774	5,111	465	2,523	30,35								
Pipeline	4,320	8,087	4,858	828	899	18,99								
Greater than 0.05 Percent Sulfur	50,872	10,389	13,116	403	2,847	77,62								
Refinery	13,110	3,870	7,574	293	1,345	26,19								
Bulk Terminal	34,307	4,266	1,600	74	1,164	41,41								
Pipeline	3,455	2,253	3,942	36	338	10,02								
esidual Fuel Oil ^c	16,505	2,660	14,898	529	7,101	41,69								
Refinery	5,358	1,880	6,268	529	4,925	18,96								
Bulk Terminal	11,147	780	8,630	0	1,912	22,46								
Pipeline	0	0	0	0	264	26								
Less than 0.31% Sulfur	4,216	165	357	36	801	5,57								
Refinery	1,281	0	143	36	759	2,2								
Bulk Terminal	2,935	165	214	0	42	3,35								
0.31 to 1.00% Sulfur	6,267	503	4,172	290	1,073	12,30								
Refinery	2,532	255	665	290	885	4,62								
Bulk Terminal	3,735	248	3,507	0	188	7,67								
Greater than 1.00% Sulfur	6,022	1,992	10,369	203	4,963	23,54								
Refinery	1,545	1,625	5,460	203	3,281	12,11								
Bulk Terminal	4,477	367	4,909	0	1,682	11,43								
laphtha for Petrochemical Feedstock Use Refinery	504 504	196 196	920 920	0 0	98 98	1,71 1,71								
Other Oils for Petrochemical Feedstock Use	0 0	63 63	2,357 2,357	1 1	217 217	2,63 2,63								
	-			•										
Special Naphthas	93	344	1,676	0	56	2,16								
Refinery Bulk Terminal	73 20	342 2	1,403 273	0 0	56 0	1,87 29								
uhvisanta	2 247	4 455	6.025	0	4 500	40.00								
ubricants	2,317	1,455	6,925	0 0	1,560	12,2								
Refinery Bulk Terminal	643 1,674	543 912	5,294 1,631	0	1,074 486	7,55 4,70								
Vaxes	55	180	559	52	190	1,03								
Refinery	55	180	559	52	190	1,03								
Petroleum Coke	601	3,650	3,742	246	2,459	10,69								
Refinery	601	3,650	3,742	246	2,459	10,69								
sphalt and Road Oil	5,098	11,639	3,855	1,311	2,037	23,94								
Refinery	2,073	5,922	3,087	1,167	1,681	13,93								
Bulk Terminal	3,025	5,717	768	144	356	10,01								
liscellaneous Products	90	281	1,276	27	154	1,82								
Refinery	52	140	688	1	117	99								
Bulk Terminal	38	139	572	18	37	80								
Pipeline	0	2	16	8	0	2								
	204,709	260,992				1,671,5								

a Includes stocks held by producers.
 b Includes tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers Intended for motor gasoline blending (e.g.,

isopropyl ether (IPE) or n-propanol).

^c Sulfur content not available for stocks held by pipelines.

W = Withheld to avoid disclosure of individual company data.

Note: Stocks are reported as of the last day of the month.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-816, "Monthly Natural Gas Liquids Report."

Table 52. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, August 1998

		Motor G	asoline				Distillate Fue			
PAD District and State	Total	Reformulated	Oxygenated	Other	Kerosene	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur	Residual Fuel	Propane/ Propylene
			,,,							.,
PAD District I	. 37,197	16,066	66	21,065	2,963	62,928	15,511	47,417	16,505	2,858
Connecticut	. 1,479	1,479	0	0	65	5,926	665	5,261	86	W
Delaware, D.C., Maryland	. 1,573	1,144	0	429	213	5,543	836	4,707	3,011	W
Florida		0	0	5,396	96	2,267	1,387	880	1,101	74
Georgia	. 2.050	0	0	2,050	47	1,390	985	405	157	W
Maine, New Hampshire, Vermont		891	0	343	449	2.497	617	1,880	603	W
Massachusetts		757	0	0	269	5,229	323	4,906	562	W
New Jersey		7,364	Ö	1,407	520	16,689	3,539	13,150	4,934	W
New York		977	59	1,935	340	8,897	1,509	7,388	3,163	W
North Carolina		0	0	2.608	231	1.957	1.024	933	222	W
Pennsylvania	,	1,591	0	4,340	433	7,256	2,413		1,414	W
			0	4,340	433 W			4,843	1,414 W	W
Rhode Island		510	•	-		1,536	195	1,341		
South Carolina	,	0	0	1,280	147	787	509	278	W	W
Virginia		1,353	0	1,080	101	2,797	1,374	1,423	547	W
West Virginia	. 204	0	7	197	W	157	135	22	W	W
PAD District II	-,	775	320	27,597	991	24,465	16,329	8,136	2,660	27,877
Illinois	. 3,855	230	0	3,625	169	3,660	2,635	1,025	1,049	851
Indiana	. 4,335	110	7	4,218	206	4,020	2,153	1,867	278	W
lowa	. 1,281	0	0	1,281	W	1,396	1,182	214	W	W
Kansas, Nebraska	. 2,364	0	0	2,364	1	2,288	1,873	415	10	19,635
Kentucky		343	0	1,185	52	1,014	494	520	W	W
Michigan		0	0	2.570	136	1.808	1,321	487	92	4,697
Minnesota		Ö	213	1,170	W	1,887	1,553	334	228	W
Missouri		Ö	0	1,460	W	730	613	117	W	W
North Dakota, South Dakota		0	2	772	W	780	455	325	W	W
		58	0					766		W
Ohio		0	3	4,182	286	2,110	1,344	492	199	
Oklahoma	,			1,480	W	1,245	753		153	590
Tennessee Wisconsin		0 34	95 0	2,023 1,267	31 W	1,274 2,253	856 1.097	418 1,156	339 45	W
PAD District III		5,569	0	23,825	1,837	23,131	13,957	9,174	14,898	24,414
Alabama		0	0	1,448	42	839	532	307	168	92
Arkansas		0	0	895	W	573	327	246	W	W
Louisiana	. 6,825	353	0	6,472	432	5,550	2,975	2,575	7,243	2,451
Mississippi	. 2,184	0	0	2,184	638	1,919	784	1,135	W	6,250
New Mexico	. 434	0	0	434	W	317	219	98	6	W
Texas	. 17,608	5,216	0	12,392	711	13,933	9,120	4,813	7,223	15,491
PAD District IV	. 3,264	0	160	3,104	83	1,780	1,413	367	529	361
Colorado		0	160	803	W	324	271	53	W	W
Idaho		Ö	0	283	W	197	127	70	W	W
Montana		Ö	0	916	W	440	440	0	68	16
Utah		0	0	556	W	439	246	193	110	258
Wyoming		0	0	546	W	380	329	51	W	46
-		10.000	400	7 204	0.4	0.440	6 627	2 500	6 027	2.000
PAD District V		10,990	189	7,281	84	9,146	6,637	2,509	6,837	2,909
Alaska		0	0	469	W	584	43	541	W	W
Arizona		221	186	465	W	578	529	49	W	W
California	, -	10,769	0	1,415	80	5,080	4,411	669	4,055	675
Hawaii		0	0	706	W	559	124	435	W	W
Nevada		0	3	123	W	89	77	12	W	W
Oregon	. 1,059	0	0	1,059	W	568	396	172	306	W
Washington		0	0	3,044	W	1,688	1,057	631	1,077	426
U.S. Total	.117,007	33,400	735	82,872	5,958	121,450	53,847	67,603	41,429	58,419

W = Withheld to avoid disclosure of individual company data.

Notes: • Stocks are reported as of the last day of the month. • Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthly Refinery Report," EIA-811, "Monthly Refinery Report," and EIA-816, "Monthly Refinery Report," EIA-811, "Monthl Natural Gas Liquids Report."

Table 53. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, August 1998

		From I to			From	II to		From	III to
Commodity	II	Ш	v	ı	Ш	IV	V	ı	II
Crude Oil	0	404	0	203	883	428	0	0	66,497
Petroleum Products	9,666	20	0	2,431	5,952	3,346	0	97,579	32,040
Pentanes Plus	0	0	0	0	179	1	0	0	820
Liquefied Petroleum Gases	0	0	0	551	4,221	38	0	2,331	2,333
Unfinished Oils	26	0	0	28	0	0	0	0	117
Motor Gasoline Blending Components	10	1	0	25	0	0	0	627	2,493
Finished Motor Gasoline	6,475	0	0	670	1,067	1,461	0	56,431	13,173
Reformulated	0	0	0	0	501	0	0	9,435	981
Oxygenated	0	0	0	0	0	0	0	0	0
Other	6,475	0	0	670	566	1,461	0	46,996	12,192
Finished Aviation Gasoline	0	0	0	0	0	15	0	109	143
Jet Fuel	272	0	0	117	7	1,006	0	12,341	5,121
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	272	0	0	117	7	1,006	0	12,341	5,121
Kerosene	0	0	0	4	0	0	0	294	22
Distillate Fuel Oil	2,839	0	0	671	363	825	0	22,085	6,127
0.05 percent sulfur and under	2,157	0	0	276	293	825	0	15,480	5,248
Greater than 0.05 percent sulfur	682	0	0	395	70	0	0	6,605	879
Residual Fuel Oil	0	0	0	27	85	0	0	2,006	120
Petrochemical Feedstocks ^a	44	0	0	0	0	0	0	154	359
Special Naphthas	0	0	0	0	0	0	0	78	118
Lubricants	0	19	0	46	30	0	0	817	368
Waxes	0	0	0	0	0	0	0	2	0
Asphalt and Road Oil	0	0	0	292	0	0	0	304	726
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	9,666	424	0	2,634	6,835	3,774	0	97,579	98,537

	From	III to		From IV to		From V to			
Commodity	IV	V	Ш	Ш	v	I	II	Ш	IV
Crude Oil	0	0	1,547	897	0	0	0	1,462	0
Petroleum Products	465	2,801	2,174	2,435	905	0	0	91	0
Pentanes Plus	0	0	178	277	0	0	0	0	0
Liquefied Petroleum Gases	0	0	1,377	2,158	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	375	1,680	421	0	565	0	0	0	0
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	0	554	0	0	0	0	0	0	0
Other	375	1,126	421	0	565	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0
Jet Fuel	45	705	11	0	103	0	0	0	0
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	45	705	11	0	103	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	45	416	187	0	237	0	0	0	0
0.05 percent sulfur and under	45	281	187	0	237	0	0	0	0
Greater than 0.05 percent sulfur	0	135	0	0	0	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	0	0
Lubricants	0	0	0	0	0	0	0	91	0
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	Ō	Ō	Ō	Ō	0	Ō	0	Ö
Total	465	2,801	3,721	3,332	905	0	0	1,553	0

a Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-817, "Monthly Tanker and Barge Movement Report."

Table 54. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, August 1998

	Froi	n I to		From II to	_	Fron	m III to
Commodity	II	Ш	1	III	IV	1	II
Crude Oil	0	404	120	883	428	0	66,497
Petroleum Products	9,586	0	553	5,567	3,346	71,933	26,354
Pentanes Plus	0	0	0	179	1	0	820
Liquefied Petroleum Gases	0	0	551	4,221	38	2,102	2,333
Motor Gasoline Blending Components	0	0	0	0	0	0	2,427
Finished Motor Gasoline	6,475	0	0	937	1,461	42,644	10,786
Reformulated	0	0	0	501	0	9,435	501
Oxygenated	0	0	0	0	0	0	0
Other	6,475	0	0	436	1,461	33,209	10,285
Finished Aviation Gasoline	0	0	0	0	15	0	115
Jet Fuel	272	0	2	0	1,006	9,233	4,973
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	272	0	2	0	1,006	9,233	4,973
Kerosene	0	0	0	0	0	294	0
Distillate Fuel Oil	2,839	0	0	230	825	17,660	4,900
0.05 percent sulfur and under	2,157	0	0	160	825	12,438	4,788
Greater than 0.05 percent sulfur	682	0	0	70	0	5,222	112
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	9,586	404	673	6,450	3,774	71,933	92,851

	Fron	n III to		From IV to	From V to		
Commodity	IV	v	п	Ш	V	ш	IV
Crude Oil	0	0	1,547	897	0	1,462	0
Petroleum Products	465	2,548	2,174	2,435	905	0	0
Pentanes Plus	0	0	178	277	0	0	0
Liquefied Petroleum Gases	0	0	1,377	2,158	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0
Finished Motor Gasoline	375	1,680	421	0	565	0	0
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	554	0	0	0	0	0
Other	375	1,126	421	0	565	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0
Jet Fuel	45	452	11	0	103	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	45	452	11	0	103	0	0
Kerosene	0	0	0	0	0	0	0
Distillate Fuel Oil	45	416	187	0	237	0	0
0.05 percent sulfur and under	45	281	187	0	237	0	0
Greater than 0.05 percent sulfur	0	135	0	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	465	2,548	3,721	3,332	905	1,462	0

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," and EIA-813, Monthly Crude Oil Report."

Table 55. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, August 1998

		From I to			From II to	From III to		
Commodity	II	III	v	ı	III	v	ı	New England
Crude Oil	0	0	0	83	0	0	0	0
Petroleum Products	80	20	0	1,878	385	0	25,646	174
Liquefied Petroleum Gases	0	0	0	0	0	0	229	0
Unfinished Oils	26	0	0	28	0	0	0	0
Motor Gasoline Blending Components	10	1	0	25	0	0	627	0
Finished Motor Gasoline	0	0	0	670	130	0	13,787	0
Reformulated	0	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0	0
Other	0	0	0	670	130	0	13,787	0
Finished Aviation Gasoline	0	0	0	0	0	0	109	15
Jet Fuel	0	0	0	115	7	0	3,108	0
Naphtha-Type	0	0	0	0	0	0	0	0
Kerosene-Type	0	0	0	115	7	0	3,108	0
Kerosene	0	0	0	4	0	0	0	0
Distillate Fuel Oil	0	0	0	671	133	0	4,425	0
0.05 percent sulfur and under	0	0	0	276	133	0	3.042	0
Greater then 0.05 percent sulfur	0	0	0	395	0	0	1,383	0
Residual Fuel Oil	0	0	0	27	85	0	2,006	159
Less than 0.31 percent sulfur	0	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur	Ô	0	Õ	Ô	Ô	0	0	0
Greater than 1.00 percent sulfur	0	0	0	27	85	0	2,006	159
Petrochemical Feedstocks ^a	44	0	0	0	0	0	154	0
Special Naphthas	0	0	Õ	0	Ô	0	78	0
Lubricants	Ö	19	Õ	46	30	Õ	817	Õ
Waxes	0	0	Õ	0	0	0	2	Õ
Asphalt and Road Oil	Ô	0	Õ	292	0	0	304	Õ
Miscellaneous Products	Ö	Ö	Ő	0	Ö	0	0	0
Total	80	20	0	1,961	385	0	25,646	174

		From	From V to				
Commodity	Central Atlantic	Lower Atlantic	II	v	ı	II	III
Crude Oil	0	0	0	0	0	0	0
Petroleum Products	1,671	23,801	5,686	253	0	0	91
Liquefied Petroleum Gases	0	229	0	0	0	0	0
Unfinished Oils	0	0	117	0	0	0	0
Motor Gasoline Blending Components	603	24	66	0	0	0	0
Finished Motor Gasoline	109	13,678	2,387	0	0	0	0
Reformulated	0	0	480	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	109	13,678	1,907	0	0	0	0
Finished Aviation Gasoline	29	65	28	0	0	0	0
Jet Fuel	48	3.060	148	253	0	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	48	3.060	148	253	0	0	0
Kerosene	0	0	22	0	0	0	0
Distillate Fuel Oil	195	4,230	1.227	0	0	0	0
0.05 percent sulfur and under	67	2.975	460	0	0	0	0
Greater then 0.05 percent sulfur	128	1.255	767	0	0	Ô	0
Residual Fuel Oil	123	1.724	120	0	0	0	0
Less than 0.31 percent sulfur	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur	0	0	Ô	0	0	Ô	0
Greater than 1.00 percent sulfur	123	1,724	120	0	0	0	0
Petrochemical Feedstocks ^a	0	154	359	0	0	0	0
Special Naphthas	36	42	118	Õ	0	Õ	0
Lubricants	400	417	368	Ō	Ö	Ō	91
Waxes	2	0	0	0	0	0	0
Asphalt and Road Oil	126	178	726	0	0	0	0
Miscellaneous Products	0	0	0	Ö	Ő	Õ	0
otal	1.671	23,801	5.686	253	0	0	91

^a Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint. Source: Energy Information Administration (EIA) Form EIA-817, "Monthly Tanker and Barge Movement Report."

Table 56. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between **PAD Districts, August 1998**

		PAD District I		PAD District II			
Commodity	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	
Crude Oil	203	404	-201	68,044	1,514	66,530	
Petroleum Products	100,010	9,686	90,324	43,880	11,729	32,151	
Pentanes Plus	0	0	0	998	180	818	
Liquefied Petroleum Gases	2,882	0	2,882	3,710	4,810	-1,100	
Ethane/Ethylene	0	0	0	616	2,453	-1,837	
Propane/Propylene	2,773	0	2,773	2,115	1,427	688	
Normal Butane/Butylene	59	0	59	486	787	-301	
Isobutane/Isobutylene	50	0	50	493	143	350	
Unfinished Oils	28	26	2	143	28	115	
Motor Gasoline Blending Components	652	11	641	2,503	25	2,478	
Finished Motor Gasoline	57.101	6.475	50.626	20.069	3.198	16,871	
Reformulated	9,435	0	9,435	981	501	480	
Oxygenated	0	0	0	0	0	0	
Other	47.666	6.475	41.191	19.088	2.697	16.391	
Finished Aviation Gasoline	109	0	109	143	15	128	
Jet Fuel	12.458	272	12,186	5,404	1.130	4,274	
Naphtha-Type	0	0	0	0	0	, 0	
Kerosene-Type	12,458	272	12,186	5.404	1,130	4,274	
Kerosene	298	0	298	22	4	[′] 18	
Distillate Fuel Oil	22,756	2,839	19,917	9.153	1,859	7,294	
0.05 percent sulfur and under	15,756	2,157	13,599	7,592	1,394	6,198	
Greater than 0.05 percent sulfur	7,000	682	6,318	1,561	465	1,096	
Residual Fuel Oil	2,033	0	2,033	120	112	8	
Petrochemical Feedstocks ^a	154	44	110	403	0	403	
Special Naphthas	78	0	78	118	Ö	118	
Lubricants	863	19	844	368	76	292	
Waxes	2	0	2	0	0	0	
Asphalt and Road Oil	596	Ō	596	726	292	434	
Miscellaneous Products	0	0	0	0	0	0	
Fotal	100,213	10,090	90,123	111,924	13,243	98,681	

		PAD District II	I	PAD District IV			PAD District V		
Commodity	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	3,646	66,497	-62,851	428	2,444	-2,016	0	1,462	-1,462
Petroleum Products	8,498	132,885	-124,387	3,811	5,514	-1,703	3,706	91	3,615
Pentanes Plus	456	820	-364	1	455	-454	0	0	0
Liquefied Petroleum Gases	6,379	4,664	1,715	38	3,535	-3,497	0	0	0
Ethane/Ethylene	3,443	201	3,242	0	1,405	-1,405	0	0	0
Propane/Propylene	1,561	3,716	-2,155	37	1,343	-1,306	0	0	0
Normal Butane/Butylene	1,081	353	728	1	487	-486	0	0	0
Isobutane/Isobutylene	294	394	-100	0	300	-300	0	0	0
Unfinished Oils	0	117	-117	0	0	0	0	0	0
Motor Gasoline Blending Components	1	3,120	-3,119	0	0	0	0	0	0
Finished Motor Gasoline	1,067	71,659	-70,592	1,836	986	850	2,245	0	2,245
Reformulated	501	10,416	-9,915	0	0	0	0	0	0
Oxygenated	0	554	-554	0	0	0	554	0	554
Other	566	60,689	-60,123	1,836	986	850	1,691	0	1,691
Finished Aviation Gasoline	0	252	-252	15	0	15	0	0	0
Jet Fuel	7	18,212	-18,205	1,051	114	937	808	0	808
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	7	18,212	-18,205	1,051	114	937	808	0	808
Kerosene	0	316	-316	0	0	0	0	0	0
Distillate Fuel Oil	363	28.673	-28.310	870	424	446	653	0	653
0.05 percent sulfur and under	293	21.054	-20,761	870	424	446	518	0	518
Greater than 0.05 percent sulfur	70	7.619	-7.549	0	0	0	135	0	135
Residual Fuel Oil	85	2.126	-2,041	0	0	0	0	0	0
Petrochemical Feedstocks ^a	0	513	-513	0	0	0	Ō	0	0
Special Naphthas	0	196	-196	0	0	0	0	0	0
Lubricants	140	1.185	-1.045	Õ	Ö	Ö	Ö	91	-91
Waxes	0	2	-2	Ö	Õ	Ö	Ö	0	0
Asphalt and Road Oil	Ö	1,030	-1,030	Ö	Ö	Ö	Ö	Ö	0
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	12,144	199,382	-187,238	4,239	7,958	-3,719	3,706	1,553	2,153

a Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-817, "Monthly Tanker and Barge Movement Report."

Appendix A

District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian No. 1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

Sub-PAD District I

New England: The States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

Central Atlantic: The District of Columbia and the States of Delaware, Maryland, New Jersey, New York, and Pennsylvania.

Lower Atlantic: The States of Florida, Georgia, North Carolina, South Carolina, Virginia and West Virginia.

PAD District II

Indiana-Illinois-Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

Minnesota-Wisconsin-North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma-Kansas-Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana-Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

PAD District IV

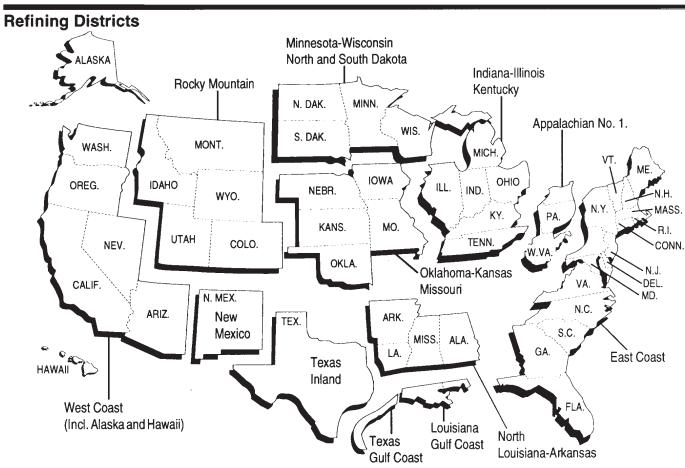
Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

Petroleum Administration for Defense (PAD) Districts





Appendix B

Explanatory Notes

The following Explanatory Notes are provided to assist in understanding and interpreting the data presented in the Detailed Statistics section of this publication.

- Note 1. Petroleum Supply Reporting System
- Note 2. Monthly Petroleum Supply Reporting System
- Note 3. Technical Notes for Detailed Statistics Tables
- Note 4. Domestic Crude Oil Production
- Note 5. Export Data
- Note 6. Quality Control and Data Revision
- Note 7. Frames Maintenance
- Note 8. Practical Limitations of Data Collection Efforts
- Note 9. 1994 Changes in the Petroleum Supply Monthly

Note 1. Petroleum Supply Reporting System

The Petroleum Supply Reporting System (PSRS) represents a family of data collection survey forms, data processing systems, and publication systems that have been consolidated to achieve comparability and consistency throughout. The survey forms that comprise the PSRS are listed below:

Form	
Number	Name
EIA-800	"Weekly Refinery Report"
EIA-801	"Weekly Bulk Terminal Report"
EIA-802	"Weekly Product Pipeline Report"
EIA-803	"Weekly Crude Oil Stocks Report"
EIA-804	"Weekly Imports Report"
EIA-807	"Propane Telephone Survey"
EIA-810	"Monthly Refinery Report"
EIA-811	"Monthly Bulk Terminal Report"
EIA-812	"Monthly Product Pipeline Report"
EIA-813	"Monthly Crude Oil Report"
EIA-814	"Monthly Imports Report"
EIA-816	"Monthly Natural Gas Liquids Report"
EIA-817	"Monthly Tanker and Barge Movement
	Report"
EIA-819M	"Monthly Oxygenate Telephone Report"
EIA-820	"Biennial Refinery Report"
	Number EIA-800 EIA-801 EIA-802 EIA-803 EIA-804 EIA-807 EIA-810 EIA-811 EIA-812 EIA-813 EIA-814 EIA-816 EIA-817

Forms EIA-800 through 804 comprise the Weekly Petroleum Supply Reporting System (WPSRS). A sample of all petroleum companies report weekly data to the Energy Information Administration (EIA) on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Data collected from the WPSRS are used to develop estimates of the most current monthly quantities in the Summary Statistics section of the *Petroleum Supply Monthly* (PSM) and which appear in the *Weekly Petroleum Status Report* (WPSR).

The Form EIA-807, "Propane Telephone Survey" is used to collect data on production, stocks, and imports of propane. These data are used to monitor the supply of propane and to report to the Congress and others on supplies when requested. Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply Reporting System (MPSRS) surveys. Data are collected on a weekly basis during the heating season (October through March) and published electronically in the *Winter Fuels Report*. During the non-heating season (April through September) data are collected on end-of-month stocks only. These data are published in the *WPSR*.

Forms EIA-810 through 814, 816, and 817 comprise the MPSRS. These surveys are used to collect detailed refinery/blender and natural gas plant operations data; refinery/blender, bulk terminal, natural gas plant, and pipeline stocks data; crude oil and petroleum product imports data; and data on movements of petroleum products and crude oil between Petroleum Administration for Defense (PAD) Districts. A description of the MPSRS forms follows in Explanatory Note 2.

Data from these surveys are published in preliminary form in the *PSM*. They are published in final form in the *Petroleum Supply Annual* (PSA), Volumes 1 and 2.

Summary information on the revision error between preliminary and final data is published once a year in the *PSM* feature article entitled, "Accuracy of Petroleum Supply Data." The last article was published in the September 1996 issue and evaluated the accuracy of the data for the current year compared with the previous year.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect preliminary data on production and stocks of oxygenates by PAD District. These data are

used to monitor the supply of oxygenates. Data are collected from a sample of respondents reporting on the MPSRS surveys and from the universe of oxygenate producers. Data are published in Appendix D of this publication and in the *WPSR*.

The Form EIA-820, "Annual Refinery Report," is used to collect data on refinery fuel use and consumption of steam and electricity, refinery receipts of crude oil by method of transportation, operable capacity for atmospheric crude oil distillation units and downstream units, as well as production capacity and storage capacity for petroleum products. This survey is the primary source of data in the Refinery Capacity section of the *PSA* Volume 1.

Note 2. Monthly Petroleum Supply Reporting System

The Monthly Petroleum Supply Reporting System (MPSRS) was implemented in January 1983 as the result of an extensive effort by the Energy Information Administration (EIA) to integrate the collection and processing of petroleum supply data that had been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the U.S. Bureau of Mines began collecting data on refinery operations, crude oil stocks and movements. The collection systems were further expanded in 1925 to include natural gas plant liquids production and storage, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS was the first effort to make them all consistent and comparable. The forms that comprise the MPSRS are:

Form	
Number	Name
EIA-810	"Monthly Refinery Report"
EIA-811	"Monthly Bulk Terminal Report"
EIA-812	"Monthly Product Pipeline Report"
EIA-813	"Monthly Crude Oil Report"
EIA-814	"Monthly Imports Report"
EIA-816	"Monthly Natural Gas Liquids Report"
EIA-817	"Monthly Tanker and Barge Movement
	Report"
EIA-819M	"Monthly Oxygenate Telephone Report"

Respondent Frame

Form EIA-810, "Monthly Refinery Report" - Operators of all operating and idle petroleum refineries and blending plants located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. Approximately 260 respondents report on the Form EIA-810.

Form EIA-811, "Monthly Bulk Terminal Report" - Every bulk terminal operating company located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and other U.S. possessions. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. In addition, the Form EIA-811 must be completed by merchant oxygenate plants that produce oxygenates. Approximately 320 respondents report on the Form EIA-811.

Form EIA-812, "Monthly Product Pipeline Report" - All product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 80 respondents report on the Form EIA-812.

Form EIA-813, "Monthly Crude Oil Report" - All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. Approximately 175 respondents report on the Form EIA-813.

Form EIA-814, "Monthly Imports Report" - All companies, including subsidiary or affiliated companies, that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia and must be reported. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity. Approximately 220 respondents report on the Form EIA-814.

Form EIA-816, "Monthly Natural Gas Liquids Report" -Operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 585 respondents report on the Form EIA-816.

Form EIA-817, "Monthly Tanker and Barge Movement Report" -All companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense (PAD) Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies which lease

vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 40 respondents report on the Form EIA-817.

Form EIA-819M, "Monthly Oxygenate Telephone Report" - The sample of companies that report on the EIA-819M are selected from the universe of companies that report on the MPSRS surveys and from the universe of oxygenate producers. The universe consists of (1) operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations); (2) operators of petroleum refineries; and (3) operators of bulk terminals, bulk stations, blending plants, and other nonrefinery facilities that store and/or blend oxygenate. Approximately 85 respondents report on the Form EIA-819M.

Sampling

The sampling procedure used for the survey Form EIA-819M is the cut-off method and is performed using software developed by EIA's Office of Statistical Standards. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported (oxygenate production and oxygenate stocks.) Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers approximately 90 percent of the total for each oxygenate item and supply type by geographic region (PAD Districts I through V) for which data may be published.

Description of Survey Forms

The Form EIA-810, "Monthly Refinery Report," is used to collect data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products.

The Form EIA-811, "Monthly Bulk Terminal Report," is used to collect data on end-of-month stock levels of finished petroleum products by State in the custody of the bulk terminal company or merchant oxygenate plant regardless of ownership. Leased tankage at other facilities is excluded. All domestic and foreign stocks held at bulk terminals and in-transit thereto, except those in-transit by pipeline are included. Petroleum products in-transit by pipeline are reported by pipeline operators on Form EIA-812, "Monthly Product Pipeline Report."

The Form EIA-812, "Monthly Product Pipeline Report," is used to collect data on end-of-month stock levels and movements of petroleum products transported by pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included.

The Form EIA-813, "Monthly Crude Oil Report," is used to collect data on end-of-month stocks of crude oil held at pipeline and tank farms (associated with the pipelines) and terminals operated by the reporting company. Also, crude oil consumed by pipelines and on leases as pump fuel, boiler fuel, etc., is reported. Data are reported on a PAD District basis.

Total Alaskan crude oil stocks in-transit by water (including stocks held at transshipment terminals between Alaska and the continental United States) to the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands are also reported by the transporting company having custody of the stocks.

Inter-PAD District movements of crude oil by pipeline are collected by the shipping and receiving PAD District. Intermediate movements for pipeline systems operating in more than two PAD Districts are not included.

The Form EIA-814, "Monthly Imports Report," is used to collect data on imports of crude oil and petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands, and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands, and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia.

The type of commodity, port of entry, country of origin, quantity (thousand barrels), sulfur percent by weight, API gravity, and name and location of the processing or storage facility are reported. Sulfur percent by weight is requested for crude oil, crude oil burned as fuel, and residual fuel oil only. API gravity is requested for crude oil only. The name and location of the processing or storage facility is requested for crude oil, unfinished oils, other hydrocarbons/hydrogen/oxygenates and blending components only.

The Form EIA-816, "Monthly Natural Gas Liquids Report," is used to collect data on the operations of natural gas processing plants and fractionators. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and plant fuel use and losses during the month are collected from operators of natural gas processing plants. End-of-month stocks are collected from fractionators.

The Form EIA-817, "Monthly Tanker and Barge Movement Report," is used to collect data on the movements of crude oil and petroleum products between PAD Districts. Data are reported by shipping and receiving PAD District and sub-PAD District. Shipments to and from the Panama Canal are also included if the shipment was delivered to the Canal.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect data on production and stocks

of oxygenates. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Data are reported on a PAD District basis.

Collection Methods

Except for the EIA-819M, survey forms for the MPSRS can be submitted by mail, facsimile, or electronic transmission. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month. Data collection for the 819M begins on the seventh working day of each month. Data are solicited by telephone or transmitted to the EIA by facsimile. Receipt of the reports are monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline.

Response Rate

The response rate is generally 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

Data Imputation

Imputation is performed for companies that fail to file Forms EIA-810 through 813, 816, and 819M. For such companies, previous monthly values are used for current values.

On the EIA-819M, data are aggregated for each geographic region. Estimation factors, which are derived from the previous year's data, are then applied to each cell to generate published estimates.

Data for nonrespondents on the Forms EIA-814 and 817 are not imputed because these data series, by respondent, are highly variable.

Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the EIA to provide company-specific data to the Department of Justice, or to any Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on Forms EIA-810 through 813, 816, 817, and 819M are kept confidential and not disclosed to the public to the extent that they satisfy the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. 552, the Department of Energy (DOE) regulations, 10 C.F.R. 1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. 1905. The information contained on Form EIA-814 are not considered confidential and historically has not been treated as such.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed. Company specific data are also provided to other DOE offices for the purpose of examining operations in the context of emergency response planning and actual emergencies.

The data collected on Forms EIA-810 through 814, 816, and 817 appear in EIA publications such as *Petroleum Supply Monthly* (PSM), *Monthly Energy Review*, *Petroleum Supply Annual* (PSA), and the *Annual Energy Review*.

Data on the breakdown between liquefied refinery gases and olefins, and lubricants is suppressed on *PSM* Table 29, "Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts" and the corresponding *PSA* table to avoid disclosure of company identifiable

Statistics representing data aggregated from less than three companies or aggregated data representing 60 percent or more of a single company's data are suppressed on the PSM and corresponding PSA tables listed below. In addition, complementary suppression is performed to avoid any residual disclosure.

- Table 28, "Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts," (inputs of oxygenates)
- Table 30, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts," (stocks of oxygenates)
- Table 51, "Stocks of Crude Oil and Petroleum Products by PAD District," (stocks of oxygenates)
- Table 52, "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products," (all products)
- Table D2, "Monthly Fuel Ethanol Production and Stocks by PAD Districts," and
- Table D3, "Monthly MTBE Production and Stocks by PAD Districts."

With the exception of the tables listed above, the tables in the *PSM* (and corresponding PSA tables) are not subject to statistical nondisclosure procedures. Thus, there may be some table cells which are based on data from only one or two respondents, or which are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable user of the data to make inferences about the data reported by a specific respondent.

Note 3. Technical Notes for Detailed Statistics Tables

The detailed statistics tables in the *Petroleum Supply Monthly* (PSM) provide complete supply and demand information for the current year. The tables are organized to locate National and Petroleum Administration for Defense (PAD) District summary data at the front followed by tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following technical notes are provided. Column and row headings are defined in the Glossary.

Supply

Field Production - Field production is the sum of crude oil production, natural gas plant liquids production, other liquids production, and finished petroleum products production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to Explanatory Note 4 for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs) in this column.

Other liquids field production is calculated by forcing the product supplied to be zero; thereby backing into field production.

Field production of finished petroleum products is calculated by (1) adding the amount of fuel ethanol that has been blended into finished motor gasoline, and (2) plus (+) or minus (-) the field production of motor gasoline blending components. Refer to Explanatory Note 8 for a further discussion of this calculation.

Negative field production of motor gasoline blending components represents an understatement for finished motor gasoline.

Negative field production of other finished motor gasoline represents an overstatement of other finished motor gasoline and an understatement of oxygenated motor gasoline.

Refinery Production - Published production of these products equal refinery production minus refinery input. Refinery production of other hydrocarbons, hydrogen and oxygenates, unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input. Negative refinery production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

Unaccounted for Crude Oil - This column is a balancing item for crude oil. This data element represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production and imports. Crude oil disposition is the sum of stock change, losses, refinery inputs, exports, and products supplied. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems). A negative result indicates that more crude oil was reported to have been supplied to refiners and exporters than they reported to have used.

Disposition

Stock Change - This column is calculated as the difference between the Ending Stocks column of this table and the Ending Stocks column of this table in the prior month's publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

Crude Losses - The volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc., as opposed to refining processing losses or gains.

Refinery Inputs - Refinery inputs of crude oil and intermediate materials (unfinished oils, gasoline blending components, other hydrocarbons and oxygenates, lique-

fied petroleum gases, and pentanes plus) that are processed at refineries to produce finished petroleum products.

Crude oil inputs represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (i.e., catalytic cracking units, cokers).

Inputs of natural gas liquids are natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas liquids are reported on a gross basis.

Inputs of unfinished oils, motor and aviation gasoline blending components, and other hydrocarbons and oxygenates are published on a net basis (i.e., refinery input minus refinery production).

Inputs of finished petroleum products are published on a net basis (i.e., refinery production minus refinery inputs) and displayed under the refinery production column.

Exports - Exports include crude oil shipments from the 50 States to Puerto Rico, and the Virgin Islands.

Products Supplied - Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts on a PAD District basis), minus stock change, minus crude losses, minus refinery inputs, minus exports.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel. Prior to January 1983, crude oil burned on leases and by pipelines as fuel were reported as either distillate or residual fuel oil and were included in product supplied for these products.

Yields

The refinery yield of finished motor gasoline is calculated by subtracting the inputs of pentanes plus, liquefied petroleum gases, other hydrocarbons/oxygenates and motor gasoline blending components from the production of finished motor gasoline before dividing by the sum of crude oil input and unfinished oils input (net). The refinery yield of finished aviation gasoline is calculated by subtracting the inputs of aviation gasoline blending components from the production of finished aviation gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

Refinery yields for all products (except finished motor gasoline and finished aviation gasoline) are calculated by dividing the production for each product by the sum of crude oil input and unfinished oils input (net) reported in the U.S. total.

Stocks

Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers.

Movements

Movements of crude oil by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate, and intracompany pipelines). Intermediate movements for crude oil pipeline systems operating in more than two PAD Districts are not included.

Movements of petroleum products by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate and intracompany pipelines). Intermediate movements for product pipeline systems operating in more than two PAD Districts are included. For example, a shipment originating in PAD District 3, passing through PAD District 2 to PAD District 1, is reported as a movement from PAD District 3 to PAD District 2 and also from PAD District 2 to PAD District 1.

Waterborne movements of crude oil and petroleum products between PAD Districts include all shipments of crude oil or petroleum products for which the transporter has custody at the time of shipment. Custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker and barge.

Note 4. Domestic Crude Oil Production

The Energy Information Administration (EIA) collects monthly crude oil production data on an ongoing basis. Data on crude oil production for States are reported to the EIA by State government agencies. Data on crude oil production for Federal offshore areas are reported to the EIA by the Minerals Management Service of the U.S. Department of the Interior and the California Department of Conservation.

Currently, all except four crude oil producing States (Michigan, New York, Ohio, and Pennsylvania) report production on a monthly basis. These four States report crude oil production on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182,

"Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service, and the California Department of Conservation. The final estimate is published in the *Petroleum Supply Annual* (PSA).

Table 26 of this publication provides estimates of crude oil production in the latest month for which most State production data are available. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available.

In order to present more timely crude oil production estimates, the EIA prepares a weekly crude oil production estimate, which is used in the Weekly Petroleum Status Report (WPSR). At the end of the production month, these weekly estimates are aggregated into an original estimate of monthly crude oil production. Approximately 45 days later, this original estimate is replaced by Statelevel interim estimates. The State-level interim estimates are based on: (a) data reported by the States (e.g., production data for Alaska are typically reported to the EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report;" (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

Table B1 is intended to provide further insight into the EIA's estimates of monthly U.S. crude oil production. It shows: (a) how the aggregate of reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month within that period; and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is a monthly aggregate of the weekly crude oil production estimates published in the *WPSR*. This original monthly estimate is used in the *Petroleum Supply Monthly* (PSM) Tables S1 and S2 until replaced by the interim estimate.
- The interim estimate is used in the *PSM* Tables 1 through 25, and in Tables S1 and S2 until replaced by the final estimate.
- The initial estimate based upon first purchase data collected on the Form EIA-182 is used as an estimation tool in generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the production month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available about 70 days after the production month and includes imputation as needed. A final revision is published concurrent

with publication of Form EIA-182 price data in the Petroleum Marketing Annual.

• The final estimate is published in the *PSA*.

Note 5. Export Data

Each month the Energy Information Administration (EIA) receives magnetic tapes of aggregated export statistics from the U.S. Bureau of the Census (EM-522 and EM-594).

Census export statistics used in the *Petroleum Supply Monthly* (PSM) reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

- (1) Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- (2) Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the U.S. Bureau of the Census. Exporters are required to file export documents with U.S. Customs officials (Customs Form 7525)

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shippent is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 6. Quality Control and Data Revision

Quality Control

The Energy Information Administration (EIA) monitors the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. Through a tracking system, the EIA provides insight into the activities of primary operators and distributors in the petroleum industry. The tracking system, known as the Petroleum Supply Reporting System (PSRS), consists of production,

Table B1. U.S. Crude Oil^a Production Estimates and Reported States^b Data by Month (Thousand Barrels per Day)

Date of Data								Mon	th of F	roduc	tion							
Availability	4-97	5-97	6-97	7-97	8-97	9-97	10-97	11-97	12-97	1-98	2-98	3-98	4-98	5-98	6-98	7-98	8-98	9-98
								Rep	orted	State D	ata							
6-14-97	1344	0																
7-14-97	1759	1415	0															
8-14-97	4586	1780	1318	0														
9-14-97	4696	4572	1716	1347	0													
10-14-97	5670	4646	4420	1642	1359	0												
11-14-97	5697	5668	4644	2811	1653	1382	0											
12-14-97	5782	5789	5731	4577	4216	1721	1669	0										
1-14-98	5785	5793	5764	5498	4513	4471	1708	1440	0									
2-14-98	5788	5798	5786	5626	5542	4498	4249	1733	1340	0								
3-14-98	6008	5994	5786	5627	5544	4614	4582	4489	1812	1289	0							
4-14-98	6011	6020	5826	5763	5715	5826	5656	4597	4453	1743	1246	0						
5-14-98	6061	6094	6064	6016	5973	6082	5901	5890	4757	4470	1702	1235	0					
6-14-98	6409	6450	6404	6016	5976	6111	6071	6127	5927	4662	4254	1638	1213	0				
7-14-98	6409	6450	6404	6365	6323	6481	6071	6082	5993	5793	4527	4242	1644	1222	0			
8-14-98	6409	6450	6404	6365	6324	6482	6447	6464	6387	5886	4532	4439	4002	1593	1184	0		
9-14-98	6409	6450	6404	6365	6324	6488	6459		6413	5956	5775	5633	5488	4910	1529	1159	0	
10-14-98	6409	6450	6404	6365	6325	6489	6460	6478	6414	5958	5777	5660	5491	5181	4028	1512	1136	0
									nout R									
10-14-98	1	1	1	1	1	1	1	1	1	6	6	8	10	11	15	24	30	33
								Mon	th of F	roduc	tion							
	4-97	5-97	6-97	7-97	8-97	9-97	10-97	11-97	12-97	1-98	2-98	3-98	4-98	5-98	6-98	7-98	8-98	9-98
								Prod	uction	Estim	ates							
Estimate																		
Original ^e	6437	6429	6380	6344	6292	6381	6393	6404	6457	6389	6407	6406	6412	6375	6333	6349	6331	6299
Interim ^f	6483	6401	6341	6316	6282	6388	6435	6450	6475	6438	6538	6466	6484	6384	6290	6322	6276	
Form EIA-182																		
Initial	5955	5937	5862	5798	5716	5868	5887	5848	5823	5765	5894	5763	5858	5690	5550	5516	5418	
Revised	5957	5892	5862	5795	5707	5784	5834	5841	5765	5880	5910	5770	5852	5716	5550	5519		
Final ^g	6441	6474	6442	6409	6347	6486	6467	6459	6531									

^a Includes lease condensate.

b Includes Federal offshore areas, Gulf of Mexico (PADD III) and Pacific (PADD V), as two separate reporting entities.

^c Includes EIA prorated monthly production in 1996 (annual average of 53 thousand barrels per day) for three States (Michigan, New York, and Ohio) for which only annual State data are available. Includes EIA prorated monthly production in 1997 (annual average of 52 thousand barrels per day) for three States (Michigan, New York, and Ohio) for which only annual State data are available.

^d Michigan, New York, and Ohio are counted as having monthly reported data in 1996 after their annual reports were received. These data are first reported as of 5-16-97. Michigan, New York, and Ohio are counted as having monthly reported data in 1997 after their annual reports were received.

^e Original estimates are weighted averages based on the weekly estimates published in the *Weekly Petroleum Status Report*.

Interim estimates were made 44 days after the end of the production month.

⁹ Published in the *Petroleum Supply Annual* 1995, DOE/EIA 0340(95)/2.

inputs, imports, inventories, movements, and other petroleum-related data collected on weekly, monthly, and annual surveys.

Survey forms are periodically reviewed for completeness, meaningfulness, and clarity. Modifications are made, when needed, to maintain efficient measure of the intended data items and to track product movement accurately throughout the industry. Through this process, the EIA can maintain consistency among forms, minimize respondent burden, and eliminate ambiguity.

Sampling and Nonsampling Errors

There are two types of errors usually associated with data produced from a survey: nonsampling errors and sampling errors. Because the estimates for the monthly surveys 810 through 813, 816, and 817 are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to nonsampling errors. Nonsampling errors, sometimes referred to as biases, are those which can arise from a number of sources: (1) the inability to obtain data from all companies in the frame or sample (nonresponse and the method used to account for nonresponses, (2) definitional difficulties and/or improperly worded questions which lead to different interpretations. (3) mistakes in recording or coding the data obtained from respondents, and (4) other errors of collection, response, coverage, and estimation.

Response rates on the monthly surveys are very high. In general, response rates average above 95 percent for the weekly survey and above 98 percent for monthly surveys. Whenever survey responses are not received in time to be included in published statistics, the data are imputed. Although imputing for missing data may not eliminate the total error associated with nonresponse, it can serve to reduce the error. The data reported in the previous month are used as imputed values for missing data for all surveys except the Forms EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report." There is no imputation procedure for these surveys because these data series, by respondent, are highly variable.

Response error is the major factor affecting the accuracy of PSRS data. Response, or reporting error, is the difference between the true value and the value reported on a survey form. Response error can occur for any number of reasons. For example, figures may be entered incorrectly when written on forms by the respondent, or errors may result from the misunderstanding of survey form instructions or definitions. Response error can also occur from the use of preliminary data when final data are not available. This can result in differences between published preliminary and final data. To help detect and minimize probable reporting errors, automated editing procedures are used to check current data for consistency with past data, as well as for internal consistency (e.g., totals equal

to the sums of the parts), and to flag those data elements that fail edit criteria.

Errors can also be introduced during data processing. For example, while creating computer data files, key errors can occur in transcribing or coding the data; or information can be entered into the wrong cell. Using well designed edit criteria which examine orders of magnitude, cell position, and historical reporting patterns, many of these errors can be identified and corrected.

Monthly data are compared to weekly data on a regular basis. Discrepancies betweenly weekly and monthly data are documented and respondents are called when discrepancies are either large (usually over 300 thousand barrels) or consistent (e.g., weekly data are always lower than monthly data). In addition, a comparison of the data collected on the PSRS with other similar data series from sources outside of the Petroleum Division is performed each year. The results of this data comparison are published once a year in the *Petroleum Supply Monthly* (PSM) feature article, "Comparison of Independent Statistics on Petroleum Supply."

Sampling errors are those errors that occur when survey estimates are based on a sample rather than being derived from a complete census of the frame. The 819M data, which are based on sample estimates, serve as leading indicators of the PSRS monthly data for oxygenates. To assess the accuracy of the 819M statistics, data are compared with the monthly aggregate data for the EIA-810, 811, and 812 surveys. Although monthly data are still subject to error, they have been thoroughly reviewed and edited, and are considered to be the most accurate data available.

Data Revision

Resubmissions are any changes to the originally submitted data that were either requested by the EIA or initiated by the respondent. Resubmissions are compared with the original submission and processed at the time of receipt. For Forms EIA-810 through 813, 816, and 817 the Resubmission Tracking System (RTS) is run after resubmissions have been processed for the month. The RTS enables the user to study major products and data series to see how company resubmissions impact published data on a month by month basis. During the processing year, a summary of the effect of these resubmissions to major series is provided in Appendix C.

For the EIA-819M data, a determination is made on whether to process the resubmissions based on the magnitude of the revision. Cell entries on publication tables are marked with an "R" for revised.

Late Response

Respondents who fail to respond within the prescribed time limit (25th day following the end of the report month)

become nonrespondents for that particular report period and are contacted by phone to obtain the current month's data. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA either by letter or telephone.

Nonresponse

Follow-up action is taken when a company fails to respond adequately to data requests from the EIA. Preliminary attempts to gather delinquent reports are made by phone. Noncompliance form letters are sent to those companies that have not submitted reports and have not responded to data requests by phone.

Note 7. Frames Maintenance

The Petroleum Division (PD) maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the survey.

The activities for frames maintenance are conducted on a monthly and annual basis. Monthly frames maintenance procedures focus on examining several frequently published industry periodicals that report changes in status (births, deaths, sales, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems operated by other offices. Survey managers review these sources regularly to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

Annual frames maintenance focuses on re-evaluating the "must submit" companies filing the Form EIA-814 and reviewing the sample frame for the Form EIA-819M, "Monthly Oxygenate Telephone Report."

To supplement monthly and annual frames maintenance activities and to provide more thorough coverage, the PD periodically conducts a comprehensive frames investigation. These investigations result in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Note 8. Practical Limitations of Data Collection Efforts

Crude Oil Lease Stock Adjustment

End-of-month crude oil stocks held on leases are reported on the EIA-813, "Monthly Crude Oil Report." However, only those companies that store 1,000 barrels or more of crude oil are required to submit a report. Previous frames analysis has shown that crude oil stocks held on leases reported to the EIA are consistently lower than the lease stocks reported to individual states.

Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states — Texas, New Mexico, and Montana. To calculate the "lease adjustment," a comparison between EIA reported data and the state government data was made and the difference added to the EIA data for the respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by Petroleum Administration for Defense (PAD) District. With this change, the "lease adjustment" could no longer be calculated on a state basis and was changed to a PAD District level.

Trans Alaskan Pipeline System Adjustment

Beginning with the January 1989 data, adjustments are made to refinery inputs and product supplied of natural gas liquids (NGLs) and refinery inputs of crude oil to account for refiner misreporting. Substantial volumes of NGLs are produced at natural gas processing plants in Alaska and injected into the crude oil moving in the Trans Alaska Pipeline System (TAPS). Refiners receiving any crude oil commingled with NGLs are instructed to report the NGL portion of that stream separately from the crude oil portion. This has not been done for Alaskan crude oil because refiners are unable to identify these volumes for accounting purposes. As a result, the NGL production in Alaska has been credited directly toward product supplied and also toward product supplied from refinery production when the refiner processes the crude oil-NGL mixture. In addition, the reporting of the commingled stream as crude oil by the refiner has overstated crude oil inputs and resulted in an increase in unaccounted for crude oil equal to the volume of NGL in the crude oil.

To offset this reporting error, an adjustment is made to refinery input in all PAD Districts receiving Alaskan crude oil. The adjustment reduces the crude oil inputs and increases the NGL inputs by an equal amount. Each PAD District adjustment is a portion of the known Alaskan-NGL production that is proportional to the PAD District's share of Alaskan crude oil received at all refineries in the United States. The greatest impact occurs in PAD District V for butane and pentanes plus.

The reporting problem which began in 1987 grew as injections on NGLs into the TAPS increased. Data for 1988 was revised in the *Petroleum Supply Annual* to account for the adjustment.

Finished Motor Gasoline Product Supplied Adjustment

Beginning with the reporting of January 1993 data, adjustments were made to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by the EIA through 1992 were underreported because the reporting system was not collecting all fuel ethanol and motor gasoline blending components being blended downstream from the refinery. The EIA was able to quantify these volumes and make corrective adjustments for 1992 in 1993 (refer to Table B2).

Fuel Ethanol Adjustment

Prior to 1993, an estimated 60 to 70 thousand barrels per day of fuel ethanol were added to motor gasoline to produce gasohol but were not included in the EIA finished motor gasoline production data. In 1992, the EIA attempted to collect these data from downstream fuel ethanol motor gasoline blenders but found that this effort was impractical and the results were inaccurate.

Beginning in January 1993, an estimate for the missing fuel ethanol blended into motor gasoline was calculated. This estimate was calculated as production (from the EIA-819M, "Monthly Oxygenate Telephone Report"), plus imports (from the EIA-814, "Monthly Imports Report"), minus inputs at refineries (from the EIA-810, "Monthly Refinery Report"), plus or minus stock change (from the EIA-819M survey). This estimate for the amount of fuel ethanol blended into motor gasoline was added to Table 1 for Natural Gas Liquids Field Production (line 14) and in the Field Production column for finished motor gasoline in Tables 2 through 25 published in the *PSM*.

An estimate for the total amount of gasohol produced with the ethanol is given as 10 times the estimated fuel ethanol blended (this assumes a 10 percent ethanol blend). This amount is added to the column labeled field production of "oxygenated gasoline" and subtracted from the field production of "other" finished gasoline. The PAD District level detail was obtained by allocating the national level estimates according to the percent of gasohol sales from the U.S. Department of Transportation, Federal Highway Administration, *Monthly Motor Fuel Reported by States*, 1994

Motor Gasoline Blending Component Adjustment

Prior to 1993, the EIA published a "product supplied" for motor gasoline blending components. Since these compo-

nents are to be blended into finished motor gasoline, there is no actual demand for this intermediate product. The EIA corrected this series by including the quantity of "product supplied" for motor gasoline blending components with "other" finished motor gasoline. This change was accomplished in Tables 2 through 25 by adding product supplied for motor gasoline blending components to the column labeled field production of "other" motor gasoline, and subtracting it from the field production column for "motor gasoline blending components."

Fuel Ethanol Stock Adjustment

Total end-of-month stocks of fuel ethanol are underreported in the PSRS because of the inability to collect data from downstream fuel ethanol motor gasoline blenders. Total stocks of fuel ethanol are assumed to be those reported by ethanol producers on the Form EIA-819M, "Monthly Oxygenate Telephone Report." The difference between the stocks reported on the EIA-819M and the stocks reported in the PSRS (from refiners, bulk terminal and pipeline operators) is added to the stocks shown for bulk terminals. If the stocks for the PSRS are higher than those reported on the EIA-819M, no adjustment is made.

Note 9. 1994 Changes in the Petroleum Supply Monthly

Effective with January 1994 data, several enhancements were made to the tables in the *Petroleum Supply Monthly* to reflect changes in the petroleum industry and to provide more meaningful petroleum statistics. These changes primarily affect data reported for imports, exports, and product supplied.

- On December 31, 1992, Ecuador withdrew as a member of the Organization of Petroleum Exporting Countries (OPEC). As of January 1994, imports of petroleum from Ecuador now appear under imports from Non-OPEC sources. No revision was made to 1993 data. Countries have been realphabetized accordingly. This change is evident in Tables S3 and 35 through 44, 49 and 50.
- Exports data are now published for oxygenates and the sub-categories of finished motor gasoline (reformulated, oxygenated, and other) and distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).
- Product supplied is now calculated for reformulated, oxygenated, and other finished motor gasoline as well as the sulfur categories of distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).

Table B2. Finished Motor Gasoline Product Supplied Adjustment, 1994 - Present (Thousand Barrels per Day)

Item/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1994													
Fuel Ethanol Adj	86	73	76	71	69	63	65	73	59	90	82	82	74
Motor Gas Blending	33	-7	27	58	51	82	98	98	81	-16	56	113	57
Product Supplied	6,980	7,275	7,395	7,564	7,644	7,922	7,884	7,975	7,615	7,548	7,464	7,924	7,601
1995													
Fuel Ethanol Adj	66	66	79	74	58	81	49	36	57	72	91	58	65
Motor Gas Blending	8	37	56	86	131	113	46	110	35	89	28	29	64
Product Supplied	7,163	7,481	7,788	7,651	7,894	8,220	7,888	8,187	7,786	7,781	7,866	7,742	7,789
1996													
Fuel Ethanol Adj	58	53	49	37	27	14	9	20	23	36	44	38	34
Motor Gas Blending	39	23	-16	14	5	66	2	-18	2	40	53	31	20
Product Supplied	7,254	7,552	7,729	7,869	7,998	8,089	8,135	8,216	7,641	8,038	7,875	7,775	7,849
1997													
Fuel Ethanol Adj	39	50	51	46	48	38	59	37	47	69	50	61	50
Motor Gas Blending	-20	61	-27	87	73	113	89	95	115	107	165	80	78
Product Supplied	7,301	7,668	7,796	8,064	8,139	8,288	8,496	8,233	8,023	8,141	7,965	8,065	8,017
1998													
Fuel Ethanol Adj	60	50	54	50	37	44	43	53					
Motor Gas Blending	123	76	128	105	89	237	143	80					
Product Supplied	7,590	7.755	7,956	8,137	8,070	8.437	8,659	8,500					

Note: Totals may not equal sum of components due to independent rounding.

Source: • Fuel Ethanol Adjustment — 1994 - 1997, Energy Information Administration (EIA), Petroleum Supply Annual (PSA), Volumes I and II (Table3, Motor gasoline field production minus motor gasoline blending component field production); 1998 —, EIA, Petroleum Supply Monthly (PSM), (Table 4). • Motor Gasoline Blending Component Adjustment — 1994 - 1997, EIA, PSA, Volumes I and II (Table 3; Motor gasoline blending component field adjustment) 1997 —, EIA, PSM (Table 4).

Table C1. Impact of Resubmissions on Major Series, 1998 (Thousand Barrels per Day, Except Where Noted)

	Janu	ıary	Febr	uary	Ма	rch	Ар	ril	Ma	ау	Ju	ne	Year to Date
Product	PSM Value	Differ- ence	Average Difference										
Inputs	15,363	13	14,977	-31	15,582	49	16,359	16	16,447	-34	16,688	26	7
Crude Oil	14,313	35	14,034	-14	14,590	47	14,961	-2	15,104	-9	15,368	1	10
Pentanes Plus		-19	151	-18	149	0	158	3	153	0	160	1	-5
LPGs		-11	320	-12	241	-7	203	-3	200	2	202	0	-5
Ethane/Ethylene		0	0	0	0	0	0	0	0	0	0	0	0
Propane/Propylene Normal Butane/Butylene		0 -9	0 197	0 -9	0 121	0 -7	0 79	0 -5	0 74	0	0 73	0	0 -5
Isobutane/Isobutylene		-3	123	-3	120	- <i>r</i> 1	124	-5 1	126	(s) 2	130	0	(s)
Oth Hydrocbns/Oxygenates		(s)	331	(s)	332	-1	373	-1	378	-1	367	1	(s)
Unfinished Oils	291	`á	197	-22	307	2	483	20	469	1	450	36	` 7
Motor Gas. Blend. Comp		4	-50	35	-34	8	185	(s)	146	-26	143	-13	1
Aviation Gas. Blend. Comp		0	-6	0	-3	0	-4	0	-4	0	-2	0	0
Production	-	-39	18,050	-57	18,559	48	19,371	10	19,403	38	19,728	22	5
Pentanes Plus		-18	322	-16	303	(s)	314	1	321	3	321	1	-5 1
LPGs Ethane/Ethylene		-15 2	2,105 675	-7 3	2,266 710	-1 (e)	2,397 710	5 (s)	2,318	18 6	2,228 622	3 2	1 2
Propane/Propylene		-4	675 1,066	-2	1,089	(s) 3	1,091	(s) 3	675 1,068	9	1,050	3	2
Normal Butane/Butylene		-10	1,000	-6	280	-3	371	2	384	4	336	(s)	-2
Isobutane/Isobutylene	191	-3	195	-2	188	(s)	225	(s)	192	-1	220	-1	-1
Oth Hydrocbns/Oxygenates		-10	300	4	242	6	263	-7	286	26	398	3	4
Motor Gas Blend. Comp		21	-76 7 405	-5	-128	7	-105	-44	-89	-52	-237	-34	-18
Finished Motor Gasoline		-24	7,485	2	7,591	8	8,029	47	8,057	35	8,372	40	18
Reformulated Oxygenated		0 -2	2,311 582	-6 -9	2,314 613	0 13	2,526 567	-1 1	2,600 436	-17 3	2,630 504	-32 1	-9 1
Other		-22	4,592	16	4,664	-5	4,936	47	5.020	50	5,237	70	26
Finished Aviation Gasoline		-1	13	(s)	22	-3	26	-3	21	(s)	22	0	-1
Jet Fuel	1,504	2	1,447	-8	1,504	3	1,509	-1	1,472	-11	1,555	(s)	-3
Naphtha-Type Jet		0	(s)	0	1	0	(s)	(s)	1	0	(s)	0	(s)
Kerosene-Type Jet		2	1,447	-8	1,503	3	1,508	-1	1,471	-11	1,555	(s)	-3
Kerosene Distillate Fuel Oil		4 1	77 3,297	2 -14	72 3,385	-1 13	45 3,447	0 -2	70 2 521	4 6	50 3,526	(s)	2 (s)
Residual Fuel Oil	766	(s)	673	2	789	2	852	(s)	3,521 773	(s)	749	-3 -4	(s)
Naphtha Pet. Feedstock		1	236	1	233	3	227	3	226	0	235	1	2
Other Oils Pet. Feedstock		(s)	214	(s)	225	(s)	233	0	210	-1	238	4	1
Special Naphthas		2	63	1	70	(s)	61	1	73	-1	77	0	(s)
Lubricants		2	162	1	180	1	185	0	191	(s)	192	(s)	1
Waxes Petroleum Coke		(s) -1	26 677	(s) -6	23 710	2 5	22 728	3 4	26 703	2	24 695	0 6	1 2
Asphalt and Road Oil		-4	376	-0 -9	393	(s)	439	-	493	6	538	(s)	-1
Still Gas		(s)	603	-4	630	3	647	3	678	(s)	695	5	1
Miscellaneous Products		`ó	48	(s)	49	(s)	54	(s)	54	(s)	52	0	(s)
Imports	9,893	135	9,577	316	9,694	185	10,398	541	10,903	73	10,702	12	208
Crude Oil		162	7,770	263	7,989	130	8,523	429	8,957	35	8,725	-4	167
Pentanes Plus		0	19	0	21 192	0	22 234		39	0	21 249	0	0
LPGs Ethane/Ethylene		(s) 0	277 18	(s) 0	26	0	234 14	(s) 0	219 14	0	14	0	(s) 0
Propane/Propylene		(s)	204	(s)	132	0	183	(s)	136	0	179	0	(s)
Normal Butane/Butylene		0	31	0	18	0	21	0	41	0	37	0	Ő
Isobutane/Isobutylene		0	24	0	15	0	16	0	27	0	20	0	0
Oth Hydrocbns/Oxygenates		0	37	2	86	1	101	0	82	0	31	(s)	1
Unfinished Oils Motor Gas.Blend.Comp		-17	261	(s)	286	13	259 213	13	309	0	298 316	0	2 19
Aviation Gas. Blend. Comp		3 0	150 0	20 0	105 0	15 0	213	39 0	248 0	21 0	0	15 0	0
Finished Motor Gasoline		-17	303	3	280	1	253	32	328	4	317	-8	3
Reformulated		5	196	3	161	1	114	28	166	28	138	9	13
Oxygenated		0	0	0	0	0	0	0	0	0	0	0	0
Other		-21	108	0	119	0	140		163	-24	179	-17	-10
Finished Aviation Gasoline		0	0	0	(s)	0	(s)	0	(s)	0	(s)	0	0
Jet Fuel		0	99 0	0	96 0	0	60 0	0	104 0	0	66 0	0	0
Naphtha-Type Jet Kerosene-Type Jet		0	99	0	96	0	60	0	104	0	66	0	0
Kerosene		0	2	0	1	0	(s)	0	(s)	0	(s)	0	0
Distillate Fuel Oil	187	7	183	18	220	17	189	19	178	0	193	8	11
Residual Fuel Oil		-4	185	8	180	9	221	8	142	12	211	1	6
Naphtha Pet. Feedstock		0	96	2	61	-2	58	0	73	0	36	0	(s)
Other Oils Pet. Feedstock		0	145	0	147	0	227 8	0	155	0	192 3	0	0
Special Naphthas		0	6 8	0	4 2	0	8 5	0	15 12	0	9	0	0
Lubricants	13	U				-		-		-	-	-	-
Lubricants Waxes		(s)	2	(s)	2	(s)	1	(S)	1	(S)	1	(S)	(S)
Lubricants Waxes Petroleum Coke	1	(s) 0	2 1	(s) 0	2 1	(s) 0	1 2	(s) 0	1 1	(s) 0	1	(s) 0	(s) 0
Waxes	1 1 9							0					

⁽s) = Less than 500 barrels per day.

Note: • Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication. • Totals may not equal sum of components due to independent rounding.

Table C1. Impact of Resubmissions on Major Series, 1998 (Thousand Barrels per Day, Except Where Noted)

	Janu	ary	Febr	uary	Ма	rch	Арі	ril	Ma	ıy	Ju	ne	Year to Date
Product	PSM Value	Differ- ence	PSM Value	Differ- ence	PSM Value	Differ- ence	PSM Value	Differ- ence	PSM Value	Differ- ence	PSM Value	Differ- ence	Average Difference
Stocks (Thousand Barrels)	1,575,800	-6,391	1,572,461	-5,526	1,588,467	-2,192	1,613,989	-1,673	1,654,113	-3,182	1,653,682	-121	-3,181
Crude Oil (excl. SPR)	320,862	-4,131	322,250	-4,453	336,430	-1,961	351,200	-14	352,664	-2,020	332,980	45	-2,089
Pentanes Plus	6,631	69	7,178	3	6,728	47	6,441	36	6,908	['] 1	7,566	-14	24
LPGs		-367	68,657	18	69,140	166	84,047	405	106,473	533	122,602	510	211
Ethane/Ethylene		0	16,506	0	16,585	0	18,546	-7	20,869	0	21,421	0	-1
Propane/Propylene		-229	32,228	4	29,855	13	37,091	34	50,322	-149	60,192	4	-54
Normal Butane/Butylene		-129	11,656	-13	13,803	136	19,550	360	26,111	761	31,725	501	269
Isobutane/Isobutylene		-9 274	8,267 13,603	27 -77	8,897	17 157	8,860	18 -17	9,171 12,931	-79	9,264 13,623	5 52	-4 -24
Oth Hydrocbns/Oxygenates Unfinished Oils		-274 -631	98,064	-189	13,510 101,875	157 -461	13,237 100,671	-1,125	98,772	14 -817	99,527	-753	-663
Motor Gas. Blend. Comp		532	48,589	-40	48,637	419	45,966	298	46,099	133	43,768	-47	216
Aviation Gas. Blend. Comp		0	150	0	110	0	119	0	182	0	182	0	0
Finished Motor Gasoline		-1,173	172,760	-141	166,394	91	168,323	-389	174,908	-419	177,680	-43	-346
Reformulated		-891	44,749	65	42,913	67	44,227	-458	47,829	-131	48,799	-170	-253
Oxygenated		3	827	3	865	0	650	1	755	3	1,290	-14	-1
Other		-285	127,184	-209	122,616	24	123,446	68	126,324	-291	127,591	141	-92
Finished Aviation Gasoline	,	7	1,504	-29	1,622	-134	1,738	-124	1,710	-35	1,493	0	-53
Jet Fuel		-85	42,250	116	42,992	87	41,456	-76	43,166	-115	44,416	-41	-19
Naphtha-Type Jet		0	32	0	49	-1	50	-1	53	0	47	0	(s)
Kerosene-Type Jet		-85	42,218	116	42,943	88	41,406	-75	43,113	-115	44,369	-41	-19
Kerosene		32	5,602	11	4,697	5	4,637	-6	4,907	-12	4,863	34	11
Distillate Fuel OilResidual Fuel Oil		-52 88	127,929 38,113	-351 51	124,425 40,990	14 -385	125,681 39,187	-467 -77	136,799 38,615	-403 -39	139,133 39,760	-88 33	-225 -55
Naphtha Pet. Feedstock		25	2,181	31	1,868	-365 40	1,716	-77 50	2,738	-39	2,458	26	-55 29
Other Oils Pet. Feedstock		6	2,251	9	1,589	-2	2,193	0	1,634	0	2,430	22	6
Special Naphthas		-12	2,093	-31	2,174	-65	1,938	7	2,022	-23	1,862	20	-17
Lubricants		23	12,169	37	11,928	34	11,079	-7	11,478	4	11,417	112	34
Waxes	,	-189	1,026	-211	906	-81	858	14	985	7	942	0	-77
Petroleum Coke	11,246	0	10,882	0	12,051	13	12,623	-93	11,977	58	11,198	130	18
Asphalt and Road Oil	26,501	-260	30,135	-280	35,210	-148	35,909	-92	34,068	25	30,799	-119	-146
Miscellaneous Products	1,547	1	1,649	0	1,765	-28	1,544	4	1,649	-74	1,674	0	-16
Product Supplied	18,256	-31	18,322	-28	18,393	73	18,624	152	17,876	57	18,818	-20	34
Crude Oil		0	0	0	0	0	0	0	0	0	0	0	0
Pentanes Plus		-1	158	4	188	-2	173	-2	171	4	147	1	1
LPGs		8	2,177	-8	2,161	1	1,892	(s)	1,582	12	1,709	4	3
Ethane/Ethylene		2	718	3	733	(s)	659	(s)	614	5	618	2	2
Propane/Propylene		3	1,329 25	-10 -1	1,270 95	2 -1	1,011 104	2	755 130	15 -9	886 98	-2 8	2
Normal Butane/Butylene Isobutane/Isobutylene		(s)	104	0	62	(s)	118	(s) -1	83	(s)	107	-4	(s) -1
Unfinished Oils		(S) -25	-109	6	-144	20	-184	15	-99	-10	-178	-38	-1 -6
Aviation Gas. Blend. Comp		0	5	0	4	0	3	0	2	0	2	0	0
Finished Motor Gasoline		5	7,755	-32	7,956	1	8,137	96	8,070	40	8,437	19	22
Reformulated		46	2,495	-36	2,535	1	2,595	45	2,650	(s)	2,735	-21	7
Oxygenated		-2	592	-9	612	13	574	1	431	` 3	480	2	1
Other		-39	4,667	14	4,810	-12	4,967	49	4,990	37	5,221	38	14
Finished Aviation Gasoline	9	(s)	22	1	18	(s)	22	-3	22	-3	29	-1	-1
Jet Fuel		9	1,590	-15	1,540	4	1,588	4	1,495	-10	1,555	-3	-2
Naphtha-Type Jet		(s)	(s)	0	-7	(s)	(s)	(s)	-1	(s)	(s)	0	(s)
Kerosene-Type Jet		9	1,590	-15	1,547	4	1,588	4	1,497	-10	1,555	-3	-2
Kerosene		3	101	2	102	(s)	45	(s)	61	4	51	-1	1
Distillate Fuel Oil		-8	3,585	14	3,589	18	3,408	33	3,219	4	3,492	-5	9 1
0.05% & under	,	-12	2,214	-8	2,255	-17	2,276	23	2,185	9	2,331	9	
Greater than 0.05% Residual Fuel Oil		3 -7	1,371 793	22 12	1,334 742	35 25	1,132 966	10 -2	1,035 707	-6 11	1,161 770	-15 -6	8 5
Naphtha Pet. Feedstock		(s)	322	3	303	1	291	3	266	2	280	(s)	1
Other Oils Pet. Feedstock		(s)	345	(s)	394	(s)	440	(s)	383	-1	407	4	1
Special Naphthas		-1	34	1	61	(3)	63	(3) -1	77	(s)	58	-1	(s)
Lubricants		-9	169	(s)	165	1	192	1	167	0	176	-3	-2
Waxes		(s)	24	1	26	-2	22	(s)	21	2	23	(s)	(s)
		-2	429	-6	366	5	432	7	416	-2	458	4	1
Petroleum Coke	343	_	723	0	500								
Petroleum Coke Asphalt and Road Oil		-3	275	-8	245	-4	428	-1	585	2	654	5	-2
	218												

⁽s) = Less than 500 barrels per day.

Note: • Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication. • Totals may not equal sum of components due to independent rounding.

EIA-819M Monthly Oxygenate Telephone Report

The EIA-819M, "Monthly Oxygenate Telephone Report," provides production data and preliminary stock data for fuel ethanol and methyl tertiary butyl ether (MTBE) in the United States and major U.S. geographic regions. Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply Reporting System surveys and from the universe of oxygenate producers. Refer to Appendix B, Explanatory Note 2 for further detail. Final data on stocks of fuel ethanol and MTBE are presented in the Detailed Statistics section. The quantity of oxygenates blended into motor gasoline previously published in this appendix is now presented in Appendix B, Table B2.

Table D1. U.S. Summary, September 1998

	Septe	mber 1998	Aug	ust 1998	Year-to-Date			
Products	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day		
Fuel Ethanol								
Production	2,926	98	2,709	87	23,830	87		
Stocks	3,169	_	2,991	_	_	_		
MTBE								
Production	6,306	210	6,724	217	55,296	203		
Stocks	8,117	_	7,695	_	_	_		

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

Table D2. Monthly Fuel Ethanol Production and Stocks by Petroleum Administration for Defense Districts (PADD)

(Thousand Barrels per Day, Except Where Noted

District/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.			l		1					l		
Production												
1997	80	82	86	77	89	75	77	80	80	87	98	98
1998	96	85	86	85	81	83	85	87	98			
Stocks (thous. bbls.)											
1997	2,169	2,139	2,291	2,302	2,681	2,966	2,620	3,036	3,109	2,605	3,005	2,758
1998	2,633	2,519	2,360	2,423	2,732	2,829	2,951	2,991	3,169			
East Coast (PADD I)												
Production												
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)											
1997	19	15	24	37	92	328	55	392	119	109	255	76
1998	110	99	86	32	32	139	230	298	101			
Midwest (PADD II)												
Production												
1997	79	81	85	76	88	74	76	79	79	87	97	97
1998	95	84	85	84	81	82	84	87	97	-	•	
Stocks (thous. bbls.												
1997	1,397	1,613	1,839	1,758	1,968	1,891	1,778	1,942	2,002	1,533	1,627	1,661
1998	1,633	1,661	1,588	1,607	1,697	1,478	1,344	1,377	1,578	•		
Gulf Coast (PADD III)												
Production												
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W	••	•••	• • •
Stocks (thous. bbls.		• • •	• • • • • • • • • • • • • • • • • • • •	•••	• • •	••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• •			
1997	, 265	138	151	212	349	385	429	350	462	266	531	332
1998	394	225	271	382	565	612	717	608	610			002
Rocky Mountain (PADI	O IV)											
Production	•											
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W	v v	V V	۷V
Stocks (thous. bbls.		v v	v v	V V	v v	v v	V V	V V	V V			
1997	110	95	83	66	72	75	73	87	156	129	129	123
1998	108	91	94	97	103	118	130	163	179	120	120	120
West Coast (PADD V)												
Production												
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W	v v	v v	v v
Stocks (thous. bbls.		v v	v v	V V	v v	v v	V V	V V	V V			
1997	, 378	278	194	228	201	287	285	265	370	569	464	567
	387	443	321	306	334	482	530	545	701	505	-707	501
1998									/!!!			

W=Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report.

Table D3. Monthly Methyl Tertiary Butyl Ether (MTBE) Production and Stocks by Petroleum Administration for Defense Districts (PADD)

(Thousand Barrels per Day, Except Where Noted)

District/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.	1		I					-				
Production												
1997	161	192	182	186	194	209	201	217	200	206	211	205
1998	188	176	201	209	195	204	R 220	217	210			
Stocks (thous. bbls.))											
1997	9,659	9,607	9,039	8,934	8,621	7,151	7,380	8,506	7,800	7,029	7,528	7,623
1998	8,690	8,725	8,976	9,025	8,400	8,762	^R 8,544	7,695	8,117			
East Coast (PADD I)												
Production												
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.))											
1997	1,895	1,839	2,154	1,463	1,235	1,094	907	1,406	1,536	1,551	1,325	1,666
1998	1,676	1,514	1,794	1,464	2,058	1,657	1,734	1,341	1,275			
Midwest (PADD II)												
Production												
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W	٧٧	V V	• • •
Stocks (thous. bbls.)		**	**	**	**	**	**	**	**			
1997	w	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W	**	**	**
Gulf Coast (PADD III)												
Production												
1997	138	171	163	165	170	183	175	191	172	183	181	180
1998	164	153	179	184	173	176	^R 191	188	181	100	101	100
Stocks (thous. bbls.)		100	110	101	110	110	101	100	101			
1997	3,545	4,223	3,887	3,413	3,008	2,559	3,027	4,083	3,147	3,097	3,100	3,168
1998	3,712	4,084	3,871	4,132	3,150	3,854	R 3,174	2,950	3,295	0,007	0,100	0,100
Rocky Mountain (PADI	O IV)											
Production	•											
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W	V V	V V	VV
Stocks (thous. bbls.)		V V	V V	v v	v v	٧٧	V V	v v	V V			
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W	VV	**	• • • • • • • • • • • • • • • • • • • •
West Coast (PADD V)												
Production												
1997	W	W	W	W	W	W	W	W	W	W	W	W
1998	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)			0.070	0.000	4.60.	0.0=5	o	0.00.	0.67	0.4.5	0.6.15	0.00-
1997	3,868	3,277	2,673	3,808	4,084	3,278	3,174	2,824	2,851	2,142	2,840	2,606
1998	3,009	2,869	3,090	3,101	2,891	2,938	3,231	3,104	3,216			

R=Revised data.

W=Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Table D4. Monthly Methyl Tertiary Butyl Ether (MTBE) Production by Merchant and Captive Plants (Thousand Barrels per Day, Except Where Noted)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.												
1992	98	94	89	79	90	90	101	91	104	118	128	125
1993	115	114	112	138	132	126	155	142	157	146	148	144
1994	123	140	129	140	139	115	154	166	160	164	150	144
1995	149	144	121	168	169	182	181	171	163	167	174	17
1996	173	172	182	183	194	202	197	179	186	187	183	184
1997	161	192	182	186	194	209	201	217	200	206	211	20
1998	188	176	201	209	195	204	^R 220	217	210			
Merchant Plants												
1992	65	62	58	48	55	53	63	53	61	76	81	77
1993	63	66	67	87	75	70	89	79	87	76	81	7
1994	63	76	66	73	72	50	73	89	90	81	84	69
1995	76	68	61	86	85	91	90	88	79	90	97	92
1996	94	92	93	95	109	123	111	96	101	98	94	8
1997	72	106	99	92	93	104	106	113	99	108	109	108
1998	97	77	104	107	94	106	^R 114	108	100			
Captive Plants												
1992	33	32	31	31	35	37	38	38	43	42	47	48
1993	52	48	45	50	57	55	67	62	70	70	67	69
1994	60	64	63	67	67	65	81	78	70	83	66	7
1995	73	76	60	83	84	91	91	83	84	76	78	79
1996	79	80	89	89	84	79	85	83	85	89	89	9
1997	89	86	83	94	102	105	95	104	101	98	102	9
1998	91	99	97	102	101	99	106	109	111			

R=Revised data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH₃-(CH₂)n-OH (e.g., methanol, ethanol, and tertiary butyl alcohol).

Alkylate. The product of an alkylation reaction. It usually refers to the high octane product from alkylation units. This alkylate is used in blending high octane gasoline.

Alkylation. A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$Degrees API = \underbrace{141.5}_{sp.gr.60^{\circ} F/60^{\circ} F} - 131.5$$

The higher the API gravity, the lighter the compound. Light crudes generally exceed 38 degrees API and heavy crudes are commonly labeled as all crudes with an API gravity of 22 degrees or below. Intermediate crudes fall in the range of 22 degrees to 38 degrees API gravity.

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

Asphalt. A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Atmospheric Crude Oil Distillation. The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600° to 750° F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

Aviation Gasoline (Finished). All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Aviation Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as other hydrocarbons, hydrogen, and oxygenates.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

Barrels Per Calendar Day. The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;

the types and grades of inputs to be processed;

the types and grades of products expected to be manufactured;

the environmental constraints associated with refinery operations;

the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

Benzene (C_6H_6). An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

Blending Components. See Motor or Aviation Gasoline Blending Components.

Blending Plant. A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.

Bonded Petroleum Imports. Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are: (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.

BTX. The acronym for the commercial petroleum aromatics benzene, toluene, and xylene. See individual categories for definitions.

Bulk Station. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

Bulk Terminal. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

Butane (C4H₁₀). A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane (C4H10). A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

Normal Butane (*C*₄*H*₁₀). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

Butylene (C₄H₈). An olefinic hydrocarbon recovered from refinery processes.

Captive Refinery Oxygenate Plants. Oxygenate production facilities located within or adjacent to a refinery complex.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

Fresh Feeds. Crude oil or petroleum distillates which are being fed to processing units for the first time.

Recycled Feeds. Feeds that are continuously fed back for additional processing.

Catalytic Hydrocracking. A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

Catalytic Hydrotreating. A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

Catalytic Reforming. A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

Low Pressure. A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

High Pressure. A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

Charge Capacity. The input (feed) capacity of the refinery processing facilities.

Coal. A black or brownish-black solid combustible substance formed by the partial decomposition of vegetable matter without access to air. The rank of coal, which includes anthracite, bituminous coal, subbituminous coal, and lignite, is based on fixed carbon, volatile matter, and heating value. Coal rank indicates the progressive alteration, or coalification, from lignite to anthracite. Lignite contains approximately 9 to 17 million BTU per ton. The heat contents of subbituminous and bituminous coal range from 16 to 24 million BTU per ton, and from 19 to 30 million BTU per ton, respectively. Anthracite contains approximately 22 to 28 million BTU per ton.

Commercial Kerosene-Type Jet Fuel. See Kerosene-Type Jet Fuel.

Crude Oil (Including Lease Condensate). A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

Domestic. Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.

Foreign. Crude oil produced outside the United States. Imported Athabasca hydrocarbons (tar sands from Canada) are included.

Crude Oil, Refinery Receipts. Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.

Crude Oil Losses. Represents the volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc. as opposed to refinery processing losses.

Crude Oil Production. The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

Crude Oil Qualities. Refers to two properties of crude oil, the sulfur content and API gravity, which affect processing complexity and product characteristics.

Delayed Coking. A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

Disposition. The components of petroleum disposition are stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels. Distillate fuel oil is reported in the following sulfur categories: 0.05% sulfur and under, for use in on-highway diesel engines which could be described as meeting EPA regulations; and greater than 0.05% sulfur, for use in all other distillate applications.

No. 1 Distillate. A petroleum distillate which meets the specifications for No. 1 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 1 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 420° F at the 10-percent recovery point and 550° F at the 90-percent recovery point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100° F.

No. 2 Distillate. A petroleum distillate which meets the specifications for No. 2 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 2 diesel

fuel as defined in ASTM Specification D 975 with distillation temperatures of 540° and 640° F at the 90-percent recovery point, and kinematic viscosities between 2.0 and 4.3 centistokes at 100° F.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100° F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

Electricity (*Purchased*). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ending Stocks. Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

ETBE (Ethyl tertiary butyl ether) (CH₃)₃COC₂H₅. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

Ethane (C₂H₆). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

Ether. A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

Ethylene (*C*₂*H*₄). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Exports. Shipments of crude oil and petroleum products from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas

processing plants, new supply of other hydrocarbons/ oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

Flexicoking. A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

Fluid Coking. A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

Fresh Feed Input. Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.

Examples:

- (1) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.
- (2) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

Fuel Ethanol (C_2H_5OH). An anhydrous denatured aliphatic alcohol intended for gasoline blending as described in Oxygenates definition.

Fuels Solvent Deasphalting. A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

Gasohol. A blend of finished motor gasoline and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Gross Input to Atmospheric Crude Oil Distillation Units. Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Heavy Gas Oil. Petroleum distillates with an approximate boiling range from 651° to 1000° F.

Hydrogen. The lightest of all gases, occurring chiefly in combination with oxygen in water; exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

Idle Capacity. The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

Imported Crude Oil Burned As Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Imports. Receipts of crude oil and petroleum products into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Isobutane. See Butane.

Isobutylene (C4H8). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isohexane (C_6H_{14}). A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2° F.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C₄), an alkylation process feedstock, and normal pentane and hexane into isopentane (C₅) and isohexane (C₆), high-octane gasoline components.

Isopentane. See Natural Gasoline and Isopentane.

Kerosene. A petroleum distillate that has a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil.

Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. The fuel is designated in ASTM Specification D1655 and Military Specifications MIL-T-5624R and MIL-T-83133D (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for turbojet and turboprop aircraft engines.

Commercial. Kerosene-type jet fuel intended for use in commercial aircraft.

Military. Kerosene-type jet fuel intended for use in military aircraft.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Light Gas Oils. Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401° F to 650° F.

Liquefied Petroleum Gases (LPG). Ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.

Lubricants. A substance used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products, or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Reporting categories include:

Paraffinic. Includes all grades of bright stock and neutrals with a Viscosity Index > 75.

Naphthenic. Includes all lubricating oil base stocks with a Viscosity Index < 75.

Note: The criterion for categorizing the lubricants is based solely on the Viscosity Index of the stocks and is independent of crude sources and type of processing used to produce the oils.

Exceptions: Lubricating oil base stocks that have been historically classified as naphthenic or paraffinic by a refiner may continue to be so categorized irrespective of the Viscosity Index criterion.

Example:

(1) Unextracted paraffinic oils that would not meet the Viscosity Index test.

Merchant Oxygenate Plants. Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.

Methanol (CH₃OH). A light, volatile alcohol intended for gasoline blending as described in Oxygenate definition.

Middle Distillates. A general classification of refined petroleum products that includes distillate fuel oil and kerosene.

Military Kerosene-Type Jet Fuel. See Kerosene-Type Jet Fuel.

Miscellaneous Products. Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils).

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that has been blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as given in ASTM Specification D-4814 or Federal Specification VV-G-1690C, includes a range in distillation temperatures from 122 degrees to 158 degrees F at the 10-percent recovery point and from 365 degrees to 374 degrees F at the 90-percent recovery point. "Motor gasoline" includes reformulated gasoline, oxygenated gasoline, and other finished gasoline. Blendstock is excluded until blending has been completed.

Reformulated Gasoline. Gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental

Protection Agency under Section 211K of the Clean Air Act. Includes oxygenated fuels program reformulated gasoline (OPRG). Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Oxygenated Gasoline. Gasoline formulated for use in motor vehicles that has an oxygen content of 1.8 percent or higher, by weight. Includes gasohol. Excludes reformulated gasoline, oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB).

OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control period.

Other Finished or Conventional Gasoline. Motor gasoline not included in the oxygenated or reformulated gasoline categories. Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Blending. Mechanical mixing of motor gasoline blending components and oxygenates to produce finished motor gasoline. Mechanical mixing of finished motor gasoline with motor gasoline blending components or oxygenates which results in increased volumes of finished motor gasoline, and/or changes in the classification of finished motor gasoline (e.g., other finished motor gasoline mixed with MTBE to produce oxygenated motor gasoline), is considered motor gasoline blending.

Motor Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) and includes reformulated gasoline blendstock for oxygenate blending (RBOB). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as individual components and included in the total for other hydrocarbons, hydrogens, and oxygenates.

MTBE (Methyl tertiary butyl ether) (CH₃)₃COCH₃. An ether intended for gasoline blending as described in Oxygenate definition.

Naphtha. A generic term applied to a petroleum fraction with an approximate boiling range between 122° and 400° F.

Naphtha Less Than 401° F. See Petrochemical Feedstocks.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290° F at the 20-percent recovery point and 470° F at the 90-percent

point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, and pentanes plus.

Natural Gas Processing Plant. A facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C₅H₁₂), obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Receipts. The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.

Normal Butane. See Butane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. The Neutral Zone between Kuwait and Saudi Arabia is considered part of OPEC.

Prior to January 1, 1993, Ecuador was a member of OPEC. Prior to January 1995, Gabon was a member of OPEC.

OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area during an oxygenated fuels program control period.

Operable Capacity. The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

Operating Capacity. The component of operable capacity that is in operation at the beginning of the period.

Operable Utilization Rate. Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

Operating Utilization Rate. Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.

Other Finished. See Motor Gasoline (Finished).

Other Hydrocarbons. Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Other Oils Equal To or Greater Than 401° F. See Petrochemical Feedstocks.

Other Oxygenates. Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Oxygenated Gasoline. See Motor Gasoline (Finished).

Oxygenates. Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. Through a series of waivers and interpretive rules, the Environmental Protection Agency (EPA) has determined the allowable limits for oxygenates in unleaded gasoline. The "Substantially Similar" Interpretive Rules (56 FR (February 11, 1991)) allows blends of aliphatic alcohols other than methanol and aliphatic ethers, provided the oxygen content does not exceed 2.7 percent by weight. The "Substantially Similar"

Interpretive Rules also provides for blends of methanol up to 0.3 percent by volume exclusive of other oxygenates, and butanol or alcohols of a higher molecular weight up to 2.75 percent by weight. Individual waivers pertaining to the use of oxygenates in unleaded gasoline have been issued by the EPA. They include:

Fuel Ethanol. Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the "gasohol waiver").

Methanol. Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the "ARCO" waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume cosolvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the "DuPont" waiver).

MTBE (Methyl tertiary butyl ether). Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the "Sun" waiver).

Pentanes Plus. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Persian Gulf. The countries that comprise the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

Petrochemical Feedstocks. Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha Less Than 401° F" and "Other Oils Equal To or Greater Than 401° F."

Naphtha Less Than 401° F. A naphtha with a boiling range of less than 401° F that is intended for use as a petrochemical feedstock.

Other Oils Equal To or Greater Than 401° *F.* Oils with a boiling range equal to or greater than 401° F that are intended for use as a petrochemical feedstock.

Petroleum Administration for Defense (PAD) Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.

Catalyst Coke. In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Pipeline (Petroleum). Crude oil and product pipelines used to transport crude oil and petroleum products respectively, (including interstate, intrastate, and intracompany pipelines) within the 50 States and the District of Columbia.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Processing Gain. The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

Processing Loss. The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

Product Supplied, Crude Oil. Crude oil burned on leases and by pipelines as fuel.

Production Capacity. The maximum amount of product that can be produced from processing facilities.

Products Supplied. Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports.

Propane (C₃H₈). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene (C_3H_6). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

RBOB. "Reformulated Gasoline Blendstock for Oxygenate Blending" is a motor gasoline blending component which, when blended with a specified type and percentage of oxygenate, meets the definition of reformulated gasoline.

Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.

Refinery Input, Crude Oil. Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).

Refinery Input, Total. The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and aviation gasoline blending components and finished petroleum products.

Refinery Production. Petroleum products produced at a refinery or blending plant. Published production of these products equals refinery production minus refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or

reclassified to become another product during the same month. Refinery production of unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input.

Refinery Yield. Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished aviation gasoline, input of aviation gasoline blending components must be subtracted from the net production of finished aviation gasoline.

Reformulated Gasoline. See Motor Gasoline (Finished).

Residual Fuel Oil. The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specification D396. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; No. 6, which includes Bunker C fuel oil, and is used for commercial and industrial heating, electricity generation and to power ships.

Residuum. Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000° F.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust pallative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Shell Storage Capacity. The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity.

Special Naphthas. All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (**Purchased**). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.

Stock Change. The difference between stocks at the beginning of the month and stocks at the end of the month. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

Strategic Petroleum Reserve (SPR). Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Sulfur. A yellowish nonmetallic element, sometimes known as "brimstone".

Supply. The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.

TAME (Tertiary amyl methyl ether) $(CH_3)_2(C_2H_5)COCH_3$. An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

Tank Farm. An installation used by gathering and trunk pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.

Tanker and Barge. Vessels that transport crude oil or petroleum products. Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal to a PAD District.

TBA (Tertiary butyl alcohol) (CH₃)₃COH. An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

Toluene (C₆H₅CH₃). Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic

reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, base for TNT.

Unaccounted for Crude Oil. Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum. See individual categories for definition.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

United States. The United States is defined as the 50 States and the District of Columbia.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: penetration at 77° F (D1321)-60 maximum; viscosity at 210° F in Saybolt Universal Seconds (SUS); (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum; oil content (D721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.5 percent maximum; other +20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.51 percent minimum to 15 percent maximum.

Working Storage Capacity. The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

Xylene (C₆H₄(CH₃)₂). Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.